



## **CAN PROPER ORAL CARE IN PREGNANCY DECREASE THE INCIDENCE OF FUTURE DENTAL CARIES IN NEWBORNS?**

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### **ABSTRACT**

The Presence of bacteria associated with Early childhood caries in infants saliva suggests the need for oral health care in children at a far younger age than previously thought. By the time a child reaches Kindergarten, 40% have Dental cavities. Populations with low socio economic status, who consume a diet rich in sugar, and whose mothers have low education levels are 32 times more likely to have this disease. The mother is the most common donor as noted in DNA fingerprinting studies that shows genotype matches between infant and mother in over 70% of cases. For this reason, mothers who themselves have experienced extensive past or current caries have a strong need for counseling on how to avoid early transmission of cariogenic bacteria to their offsprings. Minimising snacks and drinks with fermentable sugars and wiping the gums of babies without teeth are important practices for new parents to follow to help prevent future cavities.

### **INTRODUCTION**

During Pregnancy 30-50% of blood flow is increased throughout the body. One result of increased blood flow to your gums is that bacteria living at the gumline gets plenty of nutrition and even if you are free of gum diseases before pregnancy, you may now notice your gums are swollen tender and even bleed when you brush. Elevated levels of estrogen and progesterone also contribute to gum inflammation and sensitivity. This condition is known as "PREGNANCY GINGIVITIS" and 70% of women develop it. A recent clinical trial indicates that essential dental treatment such as filling a cavity is safe in 13-21 weeks of pregnancy [1].

### **PREGNANCY AND ORAL HEALTH**

Pregnancy and the subsequent birth of a child provide the opportunity for the dental professional to have a profound impact on the future dental health of both the child and the family.

In some cases, pregnancy can increase the risk of caries development, therefore our concern should not only be for the dental health of growing infant, but also for the mother during this important period of her life. Dental professionals can help a new mother to become aware of the most common dental problems associated with pregnancy and show her the ways to avoid them. Fathers should also be encouraged to maintain a good oral health during pregnancy period, as this positive attitude to oral health is likely to be carried over to the growing infant.

### **ORAL HEALTH OF EXPECTANT MOTHER**

#### **Increased caries risk during pregnancy**

1. Prolonged vomiting can have an impact on caries progression. Nausea and vomiting have been recorded in 70% of pregnant women. Usually begins between weeks 4 and 6 and finishes around week 16. Gastric reflex brings HCL [pH=1-1.5] in direct contact with the teeth quickly dissolves the fragile surface causing the progression of lesion from non-cavitated to cavitated.

2. Increased frequency of Eating [grazing] and "food fads".

3. Reduced oral hygiene due to tiredness, nausea on toothbrushing, or a concern at the increased tendency for the gingiva to bleed on brushing.

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4. Maintenance of a low sugar diet is very important [2].
5. Dental authorities no longer recommend prenatal fluoride supplementation due to the lack of proven effectiveness in reducing caries in child dentition. However, if mother is diagnosed with high caries risk she should use additional fluoride products from early in the pregnancy. Use of 0.2% NaF rinse would also be beneficial, especially after a sickness episode.
6. Mothers at high risk of caries can also be advised to use high fluoride toothpaste and to “spit and don’t rinse” after brushing [3].
7. In more extensive cases of prolonged emesis, it may be necessary to coat the lingual surfaces of maxillary teeth in particular, with unfilled resin to protect them around erosive acids [4].

#### **Factors affecting the baby during Pregnancy** **Healthy diet for good oral health of the child**

The mother's own health and nutrition during pregnancy can impact greatly on the baby's general and oral health. Factors such as pregnancy toxemia, prolonged or difficult delivery, uncontrolled diabetes, and a number of viral infections can contribute to enamel hypoplasia in an infant [5].

#### **PREGNANCY CHECKLIST**

1. Brush at least twice/day with fluoride toothpaste and soft brush.
2. Spit don't rinse after brushing.
3. Quit smoking.
4. Drink tap water.
5. Have healthy diet; snack wisely avoid soft drinks, sugary/sticky snacks.
6. After vomiting rinse your mouth with water immediately but delay brushing for 30 minutes.
7. See your dentist early in pregnancy to get your teeth and gums checked.
8. Fluoride Supplements are not recommended in pregnancy.
9. An Electric tooth brush may improve plaque removal and help to keep your gums healthy.

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#### **All health care professionals should advice women that the following actions:-**

1. Dental care is safe and effective during pregnancy.
2. First trimester diagnosis and treatment, including needed dental x-rays can treatment.
3. Needed treatment should be provided throughout pregnancy, however ideal time period is between 14th and 20th week.
4. Elective treatment can be deferred until after delivery.
5. Delay in necessary treatment could result in significant risk to the mother and indirectly to fetus [6].

#### **PREGNANCY IS A SPECIAL TIME. HOW YOU LOOK AFTER YOUR TEETH AND GUMS NOW CAN AFFECT YOUR BABY'S HEALTH AS WELL AS YOUR OWN.....**

##### **AREAS THAT NEED ATTENTION**

#Dietary counselling is the most important and urgent requirement. Type of food and liquids, its frequency and the method of consumption is the most likely cause of early childhood caries.

#Some investigators have pointed out that plaque control levels of the mother impact significantly on the transmission of streptococci to the child in the early years and thus contribute to caries risk.

#use of ART with GIC can be adopted as it is more acceptable [7].

##### **CONCLUSION**

We should educate pregnant women about oral care because that will in turn decrease the incidence of dental and periodontal problems occurring during pregnancy. Looking their (pregnant women) dental health now, will prevent a lot of dental problems in the baby.

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##### **CONFLICT OF INTEREST:**

The authors declare that they have no conflict of interest.

