Breastfeeding and risk of dental caries

doi: 10.5123/\$1679-49742016000300019

Bianca Zimmermann Santos¹ Patrícia Pasquali Dotto¹ Renata Saraiva Guedes¹

¹Centro Universitário Franciscano, Curso de Odontologia, Santa Maria-RS, Brasil

The scientific evidence related to the importance of breastfeeding for both the mother and the baby is quite clear.¹⁻⁹ In January 2016, a series of articles was published by the British journal The Lancet, documenting, through meta-analyses, 10 how breastfeeding is essential for building a better world for future generations all over the world, either in high or low income countries. Evidence shows that breastfeeding protects against infant infections and malocclusion, increases intelligence and probably reduces the occurrence of overweight and diabetes in adult life. Breastfeeding is also associated to better socioeconomic position throughout life. Besides that, improvements in breastfeeding practices could prevent the death of 823 thousand children under five years old and of 20 thousand women due to breast cancer, every year.10

It is important to highlight that the occurrence of dental caries was the only negative outcome associated to breastfeeding. There is an association between breastfeeding periods longer than 12 months and the occurrence twice or three times higher of dental caries in deciduous teeth. ¹⁰ The discussion on this finding is important, as the breast milk is the main source of nutrients in the first years of life, providing countless benefits for both the baby and the mother.

This outcome is probably the result of inadequate oral hygiene after breastfeeding,⁹ as well as of the lack of control when introducing food or sugary drinks.¹¹ In 2000, the American Academy of Pediatric Dentistry (AAPD) declared that breastfed and bottle-fed infants are

at greater risk of dental caries in childhood. Prolonged and repetitive feeding without proper oral hygiene measures is associated to dental caries in deciduous teeth.¹²

The introduction of drinks and other foods before six months of age not only is unnecessary, but can also increase the risk of reducing the production of breast milk, besides increasing the risk of infections. The World Health Organization recommends exclusive breastfeeding during the first six months of the baby's life and continued breastfeeding up to two years of age or beyond. 13 Complementary foods should be introduced in an organized manner, encouraging the infants to eat healthy foods, such as vegetables and fruits. It is also important to regulate the time of eating, adjusting the frequency of food intake and avoiding sugary foods. In this sense, the Ministry of Health published a nutririon guide for infants under 2 years old, with ten recommendations for a healthy eating. 14 As infants get older, however, contact with sugar will become inevitable. The mere prohibition of sugar consumption is not realistic and, instead of trying to eliminate it, it is necessary to change the consumption pattern, trying to use it rationally.

Moreover, the early introduction of solid food, such as cereals and vegetables, and even cow milk, may interfere in iron absorption, causing deficiencies and increasing the long-term risk of anemia, obesity, hypertension, arteriosclerosis and food allergy. The early introduction of those foods may also contribute to the beginning of an eating habit which is favorable

Correspondence:

Bianca Zimmermann Santos – Rua Guilherme Cassel Sobrinho, No. 275, apto. 902, Nossa Senhora de Lourdes, Santa Maria-RS, Brasil. CEP: 97050-270 *E-mail*: biancazsantos@hotmail.com

to dental caries. An important role for health professionals is to encourage breastfeeding and explain that the early introduction of sugar or processed cereals in the formula or juice is unnecessary.¹⁵

Dental caries is strongly related to the family's eating habits and practices. ^{16,17} In some systematic reviews, most of the authors argue that caries is associated with breastfeeding when the consumption pattern has certain characteristics such as breastfeeding on demand, large number of breastfeeding a day, prolonged breastfeeding and, mainly, frequent breastfeeding during the night, resulting in accumulation of milk in the teeth, which, combined with reduced salivary flow and lack of oral hygiene, may produce tooth decay. ^{18,19}

When complementary feeding is introduced – during the period that usually coincides with the eruption of the first teeth – it is important to toothbrush with fluoridated dentifrice. The suggestion is to brush the teeth at least twice a day and use a toothpaste with a minimum of 1,000 ppm of fluoride, and the amount depends on the age: 18,19 for infants up to 2 years old, the amount of toothpaste recommended is equivalent to a raw rice grain; after 2 years old, the amount can be increased gradually, reaching the size of a pea. Another important factor is the supervision of an adult during the tooth brushing, until the child has enough motor coordination to do it by him or herself. It is important to remind that the fluoride, if ingested in high amounts during the period of teething formation may cause dental fluorosis.

It is essential that the health professionals that assist pregnant women, puerperal women and babies are attentive, in order to guide the patients on the importance of breastfeeding, healthy introduction of complementary diet and oral hygiene. This may allow mothers and babies, in the different phases of their life course, to enjoy the countless benefits of breastfeeding, reducing the risk of developing dental caries, the only adverse outcome associated to breastfeeding, according to literature. ¹⁰

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