Association of breastfeeding, pacifier use, breathing pattern and malocclusions in preschoolers

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Editor's abstract

Breastfeeding is essential to the newborn for nutritional, psychological, neurological, orthodontic and immunological purposes. Breastfeeding requires great activity and synchrony of orofacial muscles, contributing with craniofacial growth and development. Some studies have verified that children breastfed for shorter time or even artificially develop more often non-nutritive sucking habits, which are etiologic factors of malocclusions. The aim of this study was to analyze the association among duration of breastfeeding, non-nutritive sucking habits and malocclusions in early childhood. The subjects were children with 4 and 5 years of age, of both genders. Children were examined in relation to the presence of open bite, posterior crossbite, deep overbite and increased overjet, according to the Dental Aesthetic Index (DAI). The nasal aeration was evaluated by means of Altman's mirror. Furthermore, questions were addressed to parents regarding duration of breastfeeding, use of feeding bottle, and the presence and duration of the

non-nutritive sucking habits. The association among the variables was checked by chi-square or Fisher test (p<0.05), followed by logistic regression analysis. The results showed that only 25.4% of children were breastfed up to one year of age — what is recommended by the World Health Organization —, while 29.7% were breastfed only until the third month of life and 55.8%, up to sixth month. Children who were breastfed artificially for the first year or longer time demonstrated eight times more chance of having non-nutritive sucking habits. Moreover, children in which the pacifier sucking habits persisted after 3 years of age had more chances of presenting anterior open bite (33.3 times), increased overjet (2.77 times) and posterior crossbite (5.26 times). Children with an index of nasal airing less than 12 cm² had 7.81 times more chance of presenting posterior crossbite. The authors concluded that prolonged breastfeeding decreased the prevalence of non-nutritive sucking habits in early childhood, preventing malocclusions.

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