

Exclusive Breastfeeding and Risk of Dental Malocclusion

Karen Glazer Peres, BDS, PhDa, Andreia Morales Cascaes, BDS, PhDb, Marco Aurelio Peres, BDS, PhDa, Flavio Fernando Demarco, BDS, PhDc, Iná Silva Santos, MD, PhDc, Alicia Matijasevich, MD, PhDd, and Aluisio J.D. Barros, MD, PhDc
+ Author Affiliations

aAustralian Research Centre for Population Oral Health, School of Dentistry, University of Adelaide, Adelaide, Australia;

bSchool of Dentistry, Department of Social and Preventive Dentistry, Federal University of Pelotas, Pelotas, RS, Brazil;

cPostgraduate Program in Epidemiology, Federal University of Pelotas, Pelotas, RS, Brazil; and

dDepartment of Preventive Medicine, Faculty of Medicine, University of Sao Paulo, Sao Paulo, Brazil

OBJECTIVES: The distinct effect of exclusive and predominant breastfeeding on primary dentition malocclusions is still unclear. We hypothesized that exclusive breastfeeding presents a higher protective effect against malocclusions than predominant breastfeeding and that the use of a pacifier modifies the association between breastfeeding and primary dentition malocclusions.

METHODS: An oral health study nested in a birth cohort study was conducted at age 5 years (N = 1303). The type of breastfeeding was recorded at birth and at 3, 12, and 24 months of age. Open bite (OB), crossbite, overjet (OJ), and moderate/severe malocclusion (MSM) were assessed. Poisson regression analyses were conducted by controlling for sociodemographic and anthropometric characteristics, sucking habits along the life course, dental caries, and dental treatment.

RESULTS: Predominant breastfeeding was associated with a lower prevalence of OB, OJ, and MSM, but pacifier use modified these associations. The same findings were noted between exclusive breastfeeding and OJ and between exclusive breastfeeding and crossbite. A lower prevalence of OB was found among children exposed to exclusive breastfeeding from 3 to 5.9 months (33%) and up to 6 months (44%) of age. Those who were exclusively breastfed from 3 to 5.9 months and up to 6 months of age exhibited 41% and 72% lower prevalence of MSM, respectively, than those who were never breastfed.

CONCLUSIONS: A common risk approach, promoting exclusive breastfeeding up to 6 months of age to prevent childhood diseases and disorders, should be

an effective population strategy to prevent malocclusion.