

Abstract

Exclusive Breastfeeding Is Associated with Total Breastfeeding Duration and Growth Outcomes: Icelandic Mother and Child Health Study (ICE-MCH) [†]

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Abstract: Introduction: Little is known about the association between the duration of exclusive breastfeeding (EBF) and total breastfeeding. More evidence is needed on the association between EBF and growth in whole birth cohorts. Aims: The aim of this study was to assess whether the duration of EBF is associated with total breastfeeding duration until 12 months of age. The association between EBF duration and weight and length was studied at 6, 8, 10, 12, and 48 months of age. Methods: Health-care registries were used to obtain breastfeeding and anthropometric data on all live-born children in Iceland between 1 January 2009 and 31 December 2014. Kaplan–Meier plots were conducted to assess the survival probability of total breastfeeding duration up to 12 months among infants who either received EBF or were partially breastfed at 3 months and at 5 months. For the same groups, T-tests and two-way analyses of variance, adjusted for sex, residence, birth weight, and birth length, were conducted to estimate differences in anthropometric outcomes from 6 months up to 4 years of age. Results: The total number of participants was 25,793. At 3 months, 59% received EBF and 26% were partially breastfed. At 5 months, 36% received EBF and 40% were partially breastfed. The survival probability for breastfeeding at 12 months was 47% among infants that received EBF for 3 months and 30% among infants that were partially breastfed for 3 months. Among infants that received EBF for 5 months, the survival probability at 12 months was 56%, while it was 37% among infants that were partially breastfed for 5 months. EBF infants were heavier and longer at birth and had a significantly slower growth rate up to 4 years of age, compared to non-EBF infants. Conclusions: A longer duration of EBF increases the likelihood for longer breastfeeding duration up to 12 months and is associated with slower growth up to 4 years. The size of the effect on growth was small and should be evaluated in light of the larger birth size of EBF infants, and former studies show the healthy growth of infants who received EBF for 6 months.

Keywords: infant; nutrition; growth; breastfeeding; birth cohort



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