Duration of Lactation and Incidence of Myocardial Infarction In Middle-To-Late Adulthood

Alison M. Stuebe*, Karin B. Michels, Walter C. Willett, JoAnn E. Manson, Kathryn Rexrode, Janet W. Rich-Edwards. Department of Obstetrics and Gynecology, Brigham and Women’s Hospital, Boston MA.

Background: Lactation is associated with favorable maternal glucose and lipid metabolism and lower blood pressures. Women who have breastfed have a lower risk of type 2 diabetes. We hypothesized that lactation may also be associated with a lower risk of coronary heart disease.

Methods: We conducted a prospective observational cohort study of 88,908 parous women participating in the Nurses’ Health Study from 1986 to 2002. Our primary outcome was incident myocardial infarction or death from coronary disease.

Results: During the study period, 2555 cases of coronary heart disease were diagnosed during 1,386,803 person-years of follow-up. Compared with parous women who had never breastfed, women who had breastfed for a lifetime total of ≥2 years had 36% lower risk of coronary heart disease (95% CI 22-48%, p for trend <0.0001), controlling for age, parity and stillbirth history. When additional adjustment was made for early-adult adiposity, parental history, smoking, diet, exercise, and use of aspirin, alcohol, postmenopausal hormones and multivitamins, women who had breastfed for a lifetime total of ≥2 years had a 24% lower risk of coronary heart disease (95% CI 6-38%, p for trend = 0.02) than women who had never breastfed. Women who had breastfed for a lifetime total of >1 year had a 13% (95% CI 2-23%) lower covariate-adjusted risk of coronary heart disease than women who had never breastfed.

Conclusions: In a large, prospective cohort, longer duration of breastfeeding was associated with a reduced risk of coronary heart disease. Whether this relationship is causal requires further investigation.