Maternal health benefits of breastfeeding

Diseases highly prevalent among women include type 2 diabetes, hypertension, and coronary artery disease, as well as breast, ovarian, and endometrial cancers. What single intervention can obstetrician-gynecologists recommend to their patients to reduce the risk of these major diseases?

In the past decade, breastfeeding rates have increased substantially. Between 2000 and 2015, the proportion of infants who continued to breastfeed at 12 months increased from 16% to 36%. The proportion of infants who had any breastfeeding increased from 71% to 83%.1

While the infant health benefits of breastfeeding are widely recognized, the maternal health benefits of breastfeeding are many and likely underappreciated.

**Infant health benefits of breastfeeding**

There are no large-scale, randomized studies of the long-term health benefits of breastfeeding versus formula feeding. The evidence supporting the health benefits of breastfeeding is derived from case-control and cohort studies. Breastfeeding directly benefits newborn and infant nutrition, gastrointestinal function, host defense, and psychological well-being. Compared with formula-fed newborns, breastfed infants have a reduced risk of infectious diseases including otitis media, gastroenteritis, respiratory infections, sudden infant death syndrome, and metabolic disease. These benefits alone strongly support the public health benefit of breastfeeding.2 In addition, breastfeeding greatly benefits maternal health.

**Maternal health benefits of breastfeeding**

Breastfeeding reduces a woman’s risk for type 2 diabetes, hypertension, and coronary artery disease, myocardial infarction, as well as breast, ovarian, and endometrial cancer. There are few exposures that have such a multitude of positive health benefits.

**Type 2 diabetes**

In a prospective cohort study of 1,238 women without diabetes in 1985–1986, 182 women developed type 2 diabetes after 30 years of follow-up. Compared with never breastfeed-
ing, breastfeeding for 0 to 6 months, >6 months to <12 months, or ≥12 months reduced the risk of type 2 diabetes by 25%, 48%, and 69% respectively. In the prospective Nurses’ Health Study, among parous women, each additional year of breastfeeding decreased the risk of type 2 diabetes by 15% compared with women who did not breastfeed.4

Hypertension
In the Women’s Health Initiative (WHI) study of postmenopausal women, a lifetime history of breastfeeding for 12 months or more was associated with a 12% decrease in the risk of hypertension.5 For parous women, the prevalence of hypertension among breastfeeding (≥12 months) and never breastfeeding women was estimated to be 38.6% versus 42.1%. Similar results were observed in the Nurses’ Health Study II.6

Myocardial infarction and coronary heart disease
In the prospective Nurses’ Health Study, during 1,350,965 person-years of follow-up, 2,540 women had a myocardial infarction (MI). Women who had breastfed for ≥2 years had a 37% decreased risk of MI compared with women who never breastfed. After adjustment for family history, lifestyle factors, and adiposity, the observed reduction in risk was 23%. In the WHI (observational study plus controlled trial), women with a single live birth who breastfed for 7 to 12 months had a lower risk of cardiovascular disease than women with a single live birth who did not breastfeed (hazard ratio, 0.72; 95% confidence interval, 0.53–0.97).5

Breast cancer
In a systematic review and meta-analysis of 100 publications, breastfeeding >12 months reduced the risk of breast cancer by 26%. In a systematic review of 47 studies, the relative risk of breast cancer decreased by 4.7% for every 12 months of breastfeeding. In a systematic review and meta-analysis of 3 studies, ever breastfeeding was associated with a 28% reduced risk for triple-negative (ER-, PR-, HER2-) breast cancer among parous women.10 Triple-negative breast cancer generally has a poorer prognosis than receptor-positive breast cancers.

Ovarian cancer
In a systematic review and meta-analysis of 40 publications, ever breastfeeding was associated with a 37% reduction in the risk of ovarian cancer. Among parous women, ovarian cancer risk was reduced by 10% for every 12 months of breastfeeding.11

Endometrial cancer
In a meta-analysis of 17 publications, including 8,981 cases and 17,241 controls, ever breastfeeding was associated with an 11% reduction in breast cancer risk. In a meta-analysis of 15 publications with 6,704 cases, breastfeeding was associated with a 26% reduction in endometrial cancer. After controlling for hormone use and body mass index, the reduced risk was in the range of 35%. A linear relationship between breastfeeding and reduced risk of endometrial cancer was observed, with 1 month of breastfeeding being associated with a 1.2% reduction in the risk of endometrial cancer.13

Let’s support our patients’ health by encouraging successful breastfeeding
Obstetrician-gynecologists play an important role in helping women make informed decisions about breastfeeding. Most professional organizations, including the American College of Obstetricians and Gynecologists, recommend exclusive breastfeeding for the first
6 months of life, with continued breastfeeding and introduction of complementary food from 6 to 12 months. Birth practices that help to increase successful breastfeeding include:

- inform all pregnant women about the newborn and maternal health benefits and management of breastfeeding
- initiate skin-to-skin contact at birth
- encourage the initiation of breastfeeding within 1 hour of birth
- ensure that breastfeeding newborns do not receive any food or drink other than breast milk, unless medically indicated
- encourage breastfeeding women to not use pacifiers or artificial nipples.

When women are discharged from the maternity center, providing information about community-based lactation support is helpful in ensuring continuation of successful breastfeeding.

Most patients know that exercise and maintaining a healthy weight can reduce the risk of developing many prevalent diseases. However, far fewer patients know that breastfeeding can reduce the risk of developing type 2 diabetes, hypertension, and coronary artery disease, as well as breast, ovarian, and endometrial cancers. Educating our patients about these health benefits may help them to more fully commit to breastfeeding.

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References