Response to outcomes from the Centers for Disease Control and Prevention 2018 breastfeeding report card: Public policy implications

To the Editor:

Thank you for publishing content highlighting the importance of evaluating breastfeeding programs and policies. We wish to raise several methodological concerns with the recent analysis[1] of the Center for Disease Control and Prevention's (CDC) breastfeeding report card data[2] and percent Baby Friendly Hospital Initiative (BFHI) births.[3]

Bass et al used the percentage of BFHI births in 2016 to predict 2015 breastfeeding outcomes.[1] We instead used predictor data from 2014 and found that the percentage of BFHI births was significantly and positively associated with all 4 long-term breastfeeding outcomes (LTBFOs).[4]

Delaware and Rhode Island, 2 small states with fewer than 7 birthing hospitals each, drove the lack of association found by Bass et al. We ran a sensitivity analysis excluding these 2 states and found significant positive associations between 2016 percent BFHI births and 2 of the 4 LTBFOs.[3]

Ecological fallacy occurs when individual-level inferences are made based on group-level analyses.[5] Despite the authors' claim, they did not address this issue. The only way to avoid ecological fallacy for inferences on individuals is to conduct an individual-level analysis. An individual analysis of BFHI hospital birth and LTBFOs is possible but must be conducted internally at the CDC because of privacy concerns.

The authors did not use weighting in their regression models. Each state was treated the same despite a wide variation in the number of births; for instance, California (491 748 births in 2015) was treated as equivalent to Wyoming (7765 births in 2015).[6] After repeating their analysis with inverse-variance weighting using 2014 predictor data, we found significant positive associations between the percentage of BFHI births and all LTBFOs.[2,4,7]

We support critical, evidence-based evaluation of policies and programs designed to increase breastfeeding, such as BFHI. However, we suggest that the results of the article by Bass et al contain weaknesses and should not serve as a basis for making broad policy decisions.

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Reply

To the Editor:

We appreciate the opportunity to respond to the thoughtful comments on the methodology that we used in our analysis of breastfeeding outcomes and their relationship to the designation as a Baby Friendly Hospital. The authors state that they performed alternative analyses using the 2014 birth cohort and weighted regression, as well as sensitivity analysis of the 2016 births, and obtained results that differ from ours.

As we explained in our article, the 2018 CDC Breastfeeding Report card is based on the 2015 birth cohort.[1] Because there is no published 2015 report card, we used the 2016 birth cohort because it includes all the 2015 Baby Friendly–designated facilities, as well as those that were in the final stages of designation. Our use of the 2016 birth cohort thus provided a greater opportunity for all facilities participating in Baby Friendly designation to show a positive impact on outcomes. This was an important consideration, given the