Racial and ethnic disparities in the U.S. breastfeeding and implications for maternal and child health outcomes

Adetola Louis-Jacques, MD\textsuperscript{a,\*}, Tara F. Deubel, PhD\textsuperscript{b}, Melina Taylor, MA\textsuperscript{b,\textsuperscript{c}}, and Alison M. Stuebe, MD. MSc\textsuperscript{d,\textsuperscript{e}}

\textsuperscript{a}Division of Maternal Fetal Medicine, Department of Obstetrics and Gynecology, University of South Florida Morsani College of Medicine, 2 Tampa General Circle, 6th Floor, Tampa, FL 33579
\textsuperscript{b}Department of Anthropology, University of South Florida, Tampa, FL
\textsuperscript{c}College of Public Health, University of South Florida, Tampa, FL
\textsuperscript{d}Division of Maternal Fetal Medicine, Department of Obstetrics and Gynecology, University of North Carolina, Chapel Hill, NC
\textsuperscript{e}Department of Maternal and Child Health, Carolina Global Breastfeeding Institute, Gillings School of Global Public Health, Chapel Hill, NC

**Abstract**

Marked racial and ethnic disparities exist in infant feeding in the United States. Based on a review of recent literature, this article examines current discrepancies between the 2020 Healthy People breastfeeding goals and current breastfeeding rates among women from different ethnic groups in the United States. We discuss maternal and child health outcomes associated with breastfeeding, and we review potential causes of racial and ethnic disparities in breastfeeding outcomes in the United States, especially among non-Hispanic Black, American Indian/Alaska Native, and Hispanic/Latina populations. We conclude with an overview of best practices in interventions aimed to increase U.S. breastfeeding rates, such as adoption of the baby friendly hospital initiative (BHFI) and programs that utilize peer counseling strategies to increase breastfeeding promotion and support.

\textsuperscript{\*}Corresponding author.
E-mail address: alouisjacques@health.usf.edu (A. Louis-Jacques).

**Introduction**

Breastfeeding (BF) is associated with substantial differences in health outcomes for both mothers and infants. Based on these data, professional organizations in the United States (U.S.) recommend exclusive BF for 6 months and continued BF for 1 year and beyond, in combination with solid foods introduced after 6 months.\textsuperscript{1,2} The World Health Organization (WHO) recommends exclusive BF for 6 months and maintaining BF in a child's diet for at least 2 years, along with nutritionally safe and adequate foods.\textsuperscript{3} In comparison with the 2020 Healthy People Goals established by the U.S. Department of Health and Human Services\textsuperscript{4} (Table 1), overall rates for BF initiation and continuation at 6 and 12 months (for both exclusive and any BF) remain below target in the United States, with considerable racial and ethnic disparities. Asian Americans are currently the only group that has attained the 2020 initiation and any BF goals at 6 and 12 months, while non-Hispanic White women have attained all the 2020 BF goals except any BF at 6 months. However, Non-Hispanic...
Black, American Indian/Alaska Native, and Native Hawaiian/Pacific Islander women have lower rates than non-Hispanic White women (Table 1). These disparities reflect both cultural differences and social determinants of health, underscoring the need for multifaceted approaches to achieve health equity in infant feeding.

In this article, we review current literature to discuss the following three interrelated areas of research: (1) maternal and infant health outcomes associated with breastfeeding; (2) existing racial and ethnic disparities in BF rates and associated maternal and infant health outcomes; and (3) best practices aimed to increase BF success in the United States as a whole and within specific ethnic groups. We further argue that it is important to consider the negative effects of low socioeconomic status across ethnicities in interpreting racial and ethnic disparities. In conclusion, we suggest areas for further research on sociocultural barriers to BF. Such work should consider the diverse contexts in which women make decisions about infant feeding and the critical role of peer, family, and community support networks in enabling women to achieve their infant feeding goals. Working to reduce obstacles facing minority women, particularly in low-income communities, and increasing access to evidence-based interventions at clinical, educational, and policy levels can improve breastfeeding outcomes for all women.

### Maternal and child health outcomes related to lactation

Associations between breastfeeding and both maternal and child health have been reviewed extensively. Briefly, for children, being breastfed is associated with a reduced risk of infectious morbidity, including otitis media, gastroenteritis, and lower respiratory tract infections requiring hospitalization, as well as lower risks of inflammatory bowel disease, childhood obesity, leukemia, and sudden infant death syndrome (SIDS). An exclusive human milk diet in preterm infants is associated with a lower risk of necrotizing enterocolitis (NEC). Preterm infants who receive human milk have higher neurodevelopment scores at 18 and 30 months of age. Exclusive (>3 months) or prolonged (>12 months) of BF have been associated with higher intelligence scores.

For mothers, breastfeeding is associated with a reduction in risk of breast cancer, ovarian cancer, metabolic syndrome, hypertension, type 2 diabetes mellitus, and cardiovascular disease. On a population level, the impact of these associations is substantial. A recent cost analysis found that, compared with optimal BF, defined as 90% of mothers exclusively breastfeeding each child for 6 months and continuing through 12 months, suboptimal BF rates were associated with an excess of 2619 premature maternal deaths (95% CI: 1978–3259) and 721 child deaths (95% CI: 543–899), as well as $3 billion in medical costs and $1.2 billion in non-medical costs.

Although BF is associated with improved outcomes, causal inference is a challenge, because most studies are observational; mothers who breastfeed tend to be white, leaner, married, and of higher socioeconomic status when compared with mothers who do not breastfeed. Furthermore, maternal baseline metabolic health may affect attained BF duration. Randomizing women to breastfeed or formula-feed is ethically problematic, necessitating randomized trials of BF support, such as the PROBIT study. This large trial, conducted in Belarus in the 1990s, included more than 17,000 mother–infant dyads; however, all participants initiated BF, and absolute breastfeeding rates differed in the intervention and control groups differed by 8–15% over the first postpartum year, limiting power to detect differences in health outcomes. Nevertheless, the extant literature suggests that BF is associated with clinically significant differences in health outcomes for mothers and children.

### Breastfeeding disparities by ethnicity

Racial and ethnic disparities in breastfeeding initiation and long-term success stem from a wide range of interrelated historical, cultural, social, economic, political, and psychosocial factors. Programs aimed at improving breastfeeding rates must take into consideration the diverse contexts in which infant feeding takes place in the United States. For women of color in lower income brackets in particular, more

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**Table 1 – Breastfeeding rates in the United States by race/ethnicity in 2013**

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Ever breastfed (%)</th>
<th>Breastfed at 6 mo (%)</th>
<th>Breastfed at 12 mo (%)</th>
<th>Exclusive breastfeeding through 3 mo (%)</th>
<th>Exclusive breastfeeding through 6 mo (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy people 2020 goals</td>
<td>81.9</td>
<td>60.6</td>
<td>34.1</td>
<td>46.2</td>
<td>25.5</td>
</tr>
<tr>
<td>U.S. rates</td>
<td>81.1</td>
<td>51.8</td>
<td>30.7</td>
<td>44.4</td>
<td>22.3</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>83.0</td>
<td>45.6</td>
<td>25.7</td>
<td>40.4</td>
<td>19.1</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>84.3</td>
<td>57.9</td>
<td>36.1</td>
<td>51.6</td>
<td>26.8</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>66.3</td>
<td>39.1</td>
<td>19.3</td>
<td>28.9</td>
<td>14.6</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>83.8</td>
<td>64.4</td>
<td>38.7</td>
<td>41.6</td>
<td>20.9</td>
</tr>
<tr>
<td>Non-Hispanic Hawaiian/Pacific Islander</td>
<td>75.0</td>
<td>50.2</td>
<td>32.6</td>
<td>36.3</td>
<td>20.0</td>
</tr>
<tr>
<td>Non-Hispanic American Indian/Alaska Native</td>
<td>68.3</td>
<td>41.3</td>
<td>21.6</td>
<td>33.1</td>
<td>17.9</td>
</tr>
</tbody>
</table>

mo, months.
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