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Prevalence and Predictors of Breastfeeding Duration of 24 or More Months Among Young Children

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INTRODUCTION

Breastfeeding is associated with reductions in morbidity and mortality among mothers and children.[1, 2, 3, 4] The Dietary Guidelines for Americans (DGA), American Academy of Pediatrics (AAP), and World Health Organization (WHO) recommend exclusive breastfeeding for 6 months, with continued breastfeeding for at least 1 (DGA[5]) or 2 years (AAP, [6] WHO[3]), while complementary foods are introduced.

Benefits of longer breastfeeding durations have been documented;[3, 4] however, limited studies describe US breastfeeding duration past 18 months.[7] Using data from a nationally representative survey, we examined the prevalence and predictors of breastfeeding duration ≥24 months.

METHODS

The National Survey of Children's Health (NSCH) is an annual survey designed to provide estimates of health of non-institutionalized children age 0–17 years.[8] Data are obtained from parents and caregivers through web-based and paper surveys.

Using data from 2018–2020, analyses were limited to children age 2–5 years (n = 21,691). Respondents were excluded if they never initiated breastfeeding (n = 3,498), were missing

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Contributors' Statement Page

Ms. McGowan conceptualized and designed the study, drafted the manuscript, and conducted the analysis.

Drs. Hamner and Li conceptualized and designed the study and reviewed and revised the manuscript and analytic decisions.

Dr. Marks assisted with code for statistical analysis and reviewed and revised the manuscript.

All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

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values for breastfeeding duration (n=490), or missing ≥1 covariate (n = 997). Our final analytic sample included 16,706 respondents with all lengths of breastfeeding duration.

Breastfeeding duration was estimated by asking the age when the child stopped breastfeeding (and assuming initiation at birth). If a respondent reported still breastfeeding, breastfeeding duration was estimated as the child's age.

Covariates include: maternal age at child's birth (≤30 vs > 30 years), marital status of first reported primary caregiver (single vs. married or cohabitating), highest education of adults in household (≤high school, any college, ≥college), low birth weight (<2,500 vs. ≥2,500 grams), child race or ethnicity as characterized by respondent (non-Hispanic White, non-Hispanic Black or African American, non-Hispanic other, Hispanic), child's current health insurance coverage (yes vs. no), and federal poverty level ([FPL] ≤185% vs. >185% FPL). FPL missing values were multiply imputed per NSCH guidelines.[9]

The weighted prevalence of breastfeeding duration ≥24 months was analyzed for each covariate. Mother's age, child's race or ethnicity, and FPL were selected a priori to assess for possible interaction; no interactions were found. Adjusted odds ratios were calculated using logistic regression, controlling for all covariates. Breastfeeding rates were calculated at each month. Analyses account for complex sample design adjusting for clustering, weighting, and stratification using SAS-callable SUDAAN (version 9.4). The Centers for Disease Control and Prevention determined that this secondary analysis of de-identified data was not human subjects research and did not require IRB review.

RESULTS

Among children age 2–5 years who were ever breastfed, 11.5% were breastfed for ≥24 months. Breastfeeding rates declined rapidly by infant age, with a drop of ≥10 percentage points from 6 to 7 months and 12 to 13 months (Figure 1).

Compared to mothers age >30 years, younger mothers were less likely to breastfeed for ≥24 months (aOR 0.57; 95% CI 0.45, 0.73) (Table 1). Non-married/non-cohabitating caregivers were less likely to breastfeed for ≥24 months than married or cohabitating caregivers (aOR 0.57; 0.40, 0.82). Non-Hispanic White children were less likely to breastfeed for ≥24 months than Hispanic children (aOR 0.70; 95% CI 0.51, 0.96). Compared to households with FPL ≤185%, households with FPL >185% were less likely to breastfeed for ≥24 months (aOR 0.67; 95% CI 0.48, 0.93).

DISCUSSION

Only 11.5% of US children breastfed for ≥24 months. Breastfeeding rates decline sharply by child age, especially at 6 and 12 months. Results indicated significant differences in breastfeeding ≥24 months by maternal age, caregiver marital status, child race, and household income level. The strength of this analysis is the ability to assess longer breastfeeding duration among a nationally representative sample. Limitations include potential recall bias among mothers of older children and the heterogeneity of the non-

Hispanic, other race group. Programmatic interventions and policies aimed at supporting breastfeeding duration could help persons who desire to breastfeed for ≥24 months.

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Abbreviations:

(AAP)	American Academy of Pediatrics
(WHO)	World Health Organization
(NSCH)	National Survey of Children's Health
(FPL)	Federal Poverty Level
(aOR)	Adjusted odds ratios
(IRB)	Institutional Review Board

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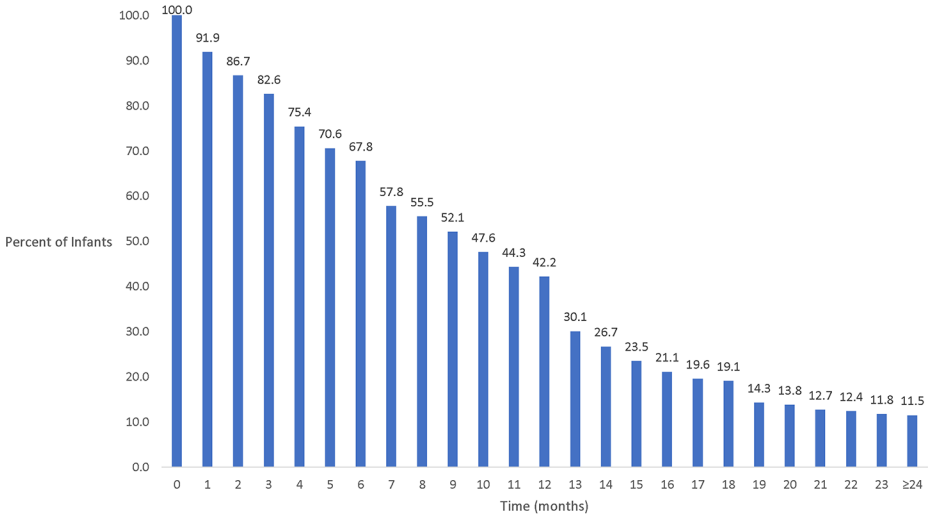

Figure:

Rate of Any Breastfeeding of Children Age 2 Through 5 who Report Initiating Breastfeeding, National Survey of Children's Health, United States, 2018–2020.

TABLE:

Prevalence of Breastfeeding for ≥24 Months Among Children Age 2–5 Years who Initiated Breastfeeding, National Survey of Children's Health,[a] United States, 2018–2020

	Weighted Percent of Children Breastfed for ≥24 months		Adjusted Odds Ratio (95% CI)
	n	%	
Total	1911	11.5	
Respondent factors			
Age of mother at child's birth			
≤ 30 years	703	8.4	0.57 (0.45, 0.73)
>30 years	1208	14.3	Ref
Marital status of adult 1			
Single	169	6.7	0.57 (0.40, 0.82)
Married or cohabitating	1742	12.2	Ref
Highest education of adults in household			
High school (including vocational, trade or business school) or less	166	10.4	0.69 (0.42, 1.13)
Any college	335	9.4	0.74 (0.54, 1.00)
≥College	1410	12.6	Ref
Child factors			
Low birth weight (<2,500g)			
Yes	126	9.4	0.78 (0.55, 1.11)
No	1785	11.7	Ref
Race or ethnicity			
non-Hispanic White	1182	10.2	0.70 (0.51, 0.96)
non-Hispanic Black or African American	62	8.9	0.66 (0.41, 1.07)
non-Hispanic Other[b]	369	16.2	1.14 (0.79, 1.65)
Hispanic	298	13.0	Ref
Health insurance coverage at time of survey			
No	73	11.4	1.00 (0.60, 1.67)
Yes	1838	11.5	Ref
Household factors			
Federal poverty level			
>185%	1453	11.2	0.67 (0.48, 0.93)
≤185%	458	12.3	Ref

[a]The National Survey of Children's Health is administered collaboratively by the U.S. Census Bureau and the Health Resources and Services Administration's Maternal and Child Health Bureau.

[b]Includes American Indian or Alaska Native persons, Asian persons, Native Hawaiian persons, Other Pacific Islander persons, and persons of multiple races.