

Factors Contributing to Infant Overfeeding with Hispanic Mothers

Diana C. Cartagena, Suzanne W. Ameringer, Jacqueline McGrath, Nancy Jallo, Saba W. Masho, and Barbara J. Myers

Correspondence

Diana C. Cartagena, RN,
CPNP, Virginia
Commonwealth University,
School of Nursing, 1100
East Leigh Street, P.O. Box
980567, Richmond, VA
23289.
cartagenadc@vcu.edu

Keywords

infant feeding
overfeeding
Hispanic
and Hispanic mother

ABSTRACT

Objective: To evaluate existing evidence on factors potentially contributing to infant overfeeding among Hispanic mothers that may explain the high infant overweight rates often seen among this ethnic group.

Data sources: Electronic databases including CINHALL and MEDLINE were searched for relevant studies published from 1998 to January 2012. Related article searches and reference list searches were completed on all included studies.

Study selection: Thirty-five studies (nine qualitative, 15 cross-sectional, nine cohort, and two longitudinal) were identified that met the following inclusion criteria: (a) studies of Hispanic-only or multiethnic mothers, (b) studies of healthy full-term infants or toddlers, (c) studies in which a majority of the sample included children within the target age group (0–24 months of age), and (d) studies conducted in the United States. The methodological quality of the studies ranged from fair to excellent.

Data extraction: Data extraction included content related to Hispanic infant feeding and weight gain.

Data synthesis: Reviewed research fell into three main foci of inquiry: breastfeeding and formula-feeding beliefs, attitudes, and practices; family and cultural influences of maternal feeding beliefs and practices; and maternal perceptions of infant feeding satiety and weight gain. The Preferred Reporting Items of Systematic Reviews Meta-Analysis (PRISMA) guidelines were followed for data extraction and reporting the results of this integrative review.

Conclusion: Three major feeding practices and beliefs among Hispanic mothers potentially contribute to infant overfeeding. Hispanic mothers are more likely to practice nonexclusive breastfeeding, initiate early introduction of solid foods including ethnic foods, and perceive chubbier infants as healthy infants. Cultural norms driving family influences and socioeconomic factors play a role in the feeding tendencies of Hispanics. Empirical research is needed to further define the primary factors that influence Hispanic mothers feeding decisions and practices that contribute to excessive weight gain in their infants.

JOGNN, 43, 139-159; 2014. DOI: 10.1111/1552-6909.12279

Accepted November 2013

Diana C. Cartagena, RN, CPNP, is a doctoral student in the School of Nursing, Virginia Commonwealth University, Richmond, VA and a pediatric nurse practitioner at Pediatric Associates of Williamsburg, Williamsburg, VA.

(Continued)

The authors report no conflict of interest or relevant financial relationships.



Childhood obesity remains a major public health problem in the United States (Ogden, Carroll, Kit, & Flegal, 2012). The Centers for Disease Control and Prevention (CDC) estimate that the childhood obesity rate has tripled from one generation ago (2012). Approximately 12.5 million (17%) of children and adolescents age 2 to 19 are obese (Ogden et al., 2012). Among infants and toddlers (birth to age 2), the prevalence of obesity has nearly doubled in recent decades. The 1999 to 2000 and 2009 to 2010 National Health and Nutrition Examination Surveys (NHANES) estimate that 9.7% of infants and toddlers were at $\geq 95^{\text{th}}$ percentile for weight-for-length (Ogden et al., 2012) and demonstrate unchanging high obesity rates in this age group. Obesity is a growing health issue for Hispanic infants and children. From 1999 to 2010, Hispanic infants persistently showed higher obesity prevalence rates

(14.8%) compared to Black (8.7%) or White infants (8.4%). Further, among children and adolescents, the odds of being obese were significantly higher for Mexican American males and females than White youth of both genders (Ogden et al., 2012).

Obesity trends are concerning in particular among Hispanic infants because longitudinal studies indicate that rapid weight gain during the first 2 years of life is associated with a greater risk of obesity during childhood and later in life (Nader et al., 2006; Owen, 2005; Stettler, Zemel, Kumanyika, & Stallings, 2002; Whitaker, Wright, Pepe, Seidel, & Dietz, 1997). Serious health consequences of obesity in older children and adults include cardiovascular disease, hypertension, and Type 2 diabetes (American Academy of Pediatrics [AAP], 2003; Barlow, 2007). Chronic diseases, in

Hispanic immigrant mothers are more likely than mothers born in the United States to initiate breastfeeding, but they are less likely to practice breastfeeding exclusively.

Suzanne W. Ameringer, PhD, RN, is an associate professor in the School of Nursing, Virginia Commonwealth University, Richmond, VA.

Jacqueline McGrath, PhD, RN, FNAP, FAAN, is a professor and the Associate Dean for Research and Scholarship in the School of Nursing, University of Connecticut, Storrs, CT and Director of Nursing Research at Connecticut Children's Medical Center, Hartford, CT.

Nancy Jallo, PhD, RN, FNP-BC, WHNP-BC, CNS, is an assistant professor in the School of Nursing, Virginia Commonwealth University, Richmond, VA.

Saba W. Masho, MD, MPH, DPH, is an associate professor in the School of Medicine, Virginia Commonwealth University, Richmond, VA.

Barbara J. Myers, PhD, is an associate professor and Director of Developmental Division in the School of Psychology, Virginia Commonwealth University, Richmond, VA.

particular Type 2 diabetes, disproportionately affect minority groups. Hispanics have the highest estimated lifetime risk for developing diabetes (males, 45.4% and females, 52.5%) compared to the general U.S. population (Narayan, Boyle, Thompson, Sorensen, & Williamson, 2003), and in 2008, Hispanics were 1.5 times more likely than Whites to die from diabetes (CDC, 2011). Obesity in Hispanic youth is potentially contributing to an increase of Type 2 diabetes in this group (AAP, 2003). According to a recent report by the CDC, one in three children born in 2000 will develop diabetes in their lifetime, and overall, Hispanic children are 1.5 times more prone than White children to develop the disease (2011). Thus, obesity prevention efforts must begin early in life and be targeted to high-risk groups such as Hispanic infants.

Recent research findings show ethnic and racial differences in prenatal and early-in-life risk factors related to obesity in infants. Although Black and Hispanic women are more prone to be overweight or obese prior to pregnancy, Hispanic women have a higher risk for gestational diabetes (CDC, 2011). Hispanic mothers are more likely than White or Black mothers to initiate breastfeeding, but they show low rates of exclusive breastfeeding at 6 months. Hispanic and Black mothers are more inclined to introduce solid foods before age 4 months and show greater maternal control over their infant-feeding patterns. In addition, compared to White infants, Black and Hispanic infants experience rapid weight gain in infancy (Snethen, Hewitt, & Goretzke, 2007; Taveras, Gillman, Kleinman, Rich-Edwards, & Rifas-Shiman, 2010). Little is known about the factors that contribute to rapid weight gain in infancy. Studies of Hispanic mothers indicate that their feeding beliefs and practices are likely to promote infant overfeeding. The purpose of this integrative review was to evaluate existing evidence on factors that potentially contribute to infant overfeeding among Hispanic mothers and may explain the high infant overweight rates often seen among this ethnic group.

The American Academy of Pediatrics (AAP) and World Health Organization (WHO) recommend

breastfeeding exclusively for the first six months of an infant's life (AAP, 2005; WHO, 2001). The AAP Committee on Nutrition supports introduction of appropriate complementary foods between age 4 and 6 months and continued breastfeeding for at least 12 months (AAP, 2005). In updated guidelines, the WHO now recommends using the growth of breastfed infants as the norm to which the growth of formula-fed infants should be compared (CDC, 2010). This recommendation is supported by the dietary guidelines for U.S. infants that are based on the nutritional components and average intake of human milk. As a result, the WHO (2006) released new international growth charts for use in children age < 24 months and recommend use of the 97.7th percentiles as the indicator of high weight for recumbent length in this age group.

The term *overfeeding* is not well defined in the literature. However, findings from observational studies of formula-fed infants show higher intakes of formula and other sources of energy to be positively associated with infancy weight gain and childhood body mass index (BMI) (Ong, Emmett, Noble, Ness, & Dunger, 2006). For the purpose of this review, *overfeeding* is defined as feeding behaviors leading to an energy intake for the infant that exceeds the requirements for normal growth and development.

Latinos or Hispanics represent a heterogeneous ethnic group of people with origins in the regions of Central America, including the Caribbean, South America, and other Spanish speaking cultures (Flores, 2000). Brazilians and Portuguese are also classified as Hispanic by federal and local government agencies. There is limited empirical evidence on the factors that contribute to overweight among infants other than for Mexican Americans. A better understanding of the factors underlying excessive weight gain in Hispanic infants could lead to the development of targeted preventive interventions important to improve infant health and well-being.

Methods

Data Sources and Extraction

An electronic search of journal articles was conducted for the purpose of locating published research focused on infant feeding in Hispanic mothers. The initial search strategy included broad and inclusive criteria to capture available research on the topic using MEDLINE and CINAHL

Download English Version:

<https://daneshyari.com/en/article/2633382>

Download Persian Version:

<https://daneshyari.com/article/2633382>

[Daneshyari.com](https://daneshyari.com)