



## Tummy Time for Latinos With Limited English Proficiency: Evaluating the Feasibility of a Cultural and Linguistically Adapted Parent Education Intervention



Alexandra Nitsos, BSN, RN<sup>a</sup>, Robin Dawson Estrada, PhD, RN, CPNP-PC<sup>a,\*</sup>, DeAnne K. Hilfinger Messias, PhD, RN, FAAN<sup>b</sup>

<sup>a</sup> University of South Carolina, College of Nursing, Columbia, SC, United States

<sup>b</sup> University of South Carolina, College of Nursing and Women's and Gender Studies Program, Columbia, SC, United States

### ARTICLE INFO

#### Article history:

Received 8 January 2017

Revised 6 April 2017

Accepted 13 April 2017

Available online xxxx

### ABSTRACT

**Purpose:** Tummy Time is preventive positioning designed to strengthen an infant's neck and upper body muscles and minimize musculoskeletal disorders, including positional plagiocephaly. Latino parents with limited English proficiency (LEP) may experience barriers to receiving instruction on this important health-promotion strategy. Study aims included 1) adaptation and implementation of a Spanish-language version of Tummy Time; 2) evaluation of participant Tummy Time knowledge; and 3) assessment of efficacy and acceptability of the Spanish language intervention.

**Design and Methods:** This feasibility study involved translation of educational materials into Spanish, creation of Spanish-language print materials, and training of bilingual research assistants to deliver the educational intervention. Participants were 21 Latino expectant and current parents with self-identified LEP. Participants completed brief pre- and post-tests and performed a return demonstration.

**Results:** Participant knowledge of Tummy Time increased post-intervention. Program evaluation and on-site observations supported feasibility and acceptability.

**Conclusions:** The cultural and linguistic tailoring of targeted educational interventions is a feasible and potentially effective strategy to overcome barriers experienced by parents with limited English proficiency and may contribute to improved infant health outcomes.

**Practice Implications:** To be effective, health education programs must be tailored to the target population. Pediatric nurses and nurse practitioners should be aware that populations with LEP face many barriers that may inhibit their ability to participate in and understand health promotion educational activities. While translating interventions can mitigate language barriers, providers should also evaluate and address other barriers such as time constraints, transportation issues, and trust.

© 2017 Elsevier Inc. All rights reserved.

### Introduction

In 1992, the American Academy of Pediatrics (AAP) launched the “Back to Sleep,” (now known as “Safe to Sleep”) public awareness program (Zachry & Kitzmann, 2011), aimed at decreasing the incidence of sudden infant death syndrome (SIDS). SIDS is the unexplained death of an infant less than one year of age, after other causes (e.g., infection, congenital disorders, trauma) have been ruled out through thorough investigation (Burnett & Bechtel, 2014). Although the specific causes of SIDS are unclear and most likely multifactorial, SIDS is positively correlated with a prone sleeping position among infants (Adams, Good, & DeFranco, 2009).

An effective preventive intervention to address this easily modifiable risk factor is to place newborn infants to sleep in a supine position (American Academy of Pediatrics, 2017). The drop in SIDS by over 50% in the United States over the past 25 years is evidence of the success of the widespread implementation of the Back to Sleep campaign (Adams, Ward, & Garcia, 2015). However, widespread adoption of exclusive placement of infants in a supine position has had unintended consequences for infants, including slower attainment of developmental milestones (e.g., rolling over, crawling, sitting or standing up), cognitive and organizational skills delays, eye-tracking problems, behavioral issues, and an increase in skull deformities and torticollis (Cabrera-Martos et al., 2015; Lack of ‘Tummy Time’ leads to motor delays in infants, PTs say, 2013). Skull deformities such as positional plagiocephaly can develop during pregnancy due to in utero positioning, or gradually over the first few months of life due to prolonged

\* Corresponding author.

E-mail address: robin.estrada@sc.edu (R.D. Estrada).

supine positioning. Positional plagiocephaly, (also known as deformational plagiocephaly and plagiocephaly without synostosis) is an asymmetric flattening of the occiput that occurs when the baby's soft skull is molded due to pressure on the back of the head (Laughlin, Luerssen, & Dias, 2011). Torticollis, or a shortening of neck muscles on one side, often accompanies plagiocephaly. This shortening of the neck muscles causes the baby's head to tilt and neck to turn in a twisted position, and is often uncomfortable or even painful. These conditions are more than cosmetic; plagiocephaly and torticollis are associated with an increased incidence in otitis media, dental malocclusion, and visual field defects (Stevens, 2012). Treatment for infants with severe cases of plagiocephaly often involves helmet therapy over a period of 8 to 18 months, with costs ranging from \$2000 to \$4000 (Van Wijk et al., 2014). Infants with torticollis frequently require physical therapy treatment for neck stretching exercises and positional changes (Laughlin et al., 2011).

### *Tummy Time*

Recognizing the need for prevention of untoward consequences of the Back to Sleep infant positioning recommendations, the AAP recommended the implementation of Tummy Time, an intervention aimed at strengthening and stretching an infant's neck and upper body muscles (American Academy of Pediatrics, 2016). Tummy Time is brief, effective, inexpensive, and suitable for most forms of plagiocephaly and torticollis, regardless of whether the conditions developed in utero or secondary to positioning after birth. Easily implemented by parents and caregivers, Tummy Time involves an adult playing and interacting with an infant placed in a prone position while awake, two to three times a day for about three to five minutes each time, with the duration of time gradually increasing as the infant gains strength (American Academy of Pediatrics, 2017). The Tummy Time program includes neck stretching exercises appropriate for torticollis (Gupta, 2014). These activities also prepare the infant for developmental advances, such as sliding on the abdomen, crawling, and lifting the head and neck (Back to Sleep, Tummy to Play, 2011).

### *Significance*

Given that the positive impact effect of Tummy Time activities occurs primarily between birth and six months of age, early parental education is crucial (Gupta, 2014). However, many post-partum mothers do not receive complete and appropriate positioning information from health care providers, resulting in confusion and uncertainty (Koren, Reece, Kahn-D'angelo, & Medeiros, 2010). Findings from prior research indicates that even when parents and caregivers are aware of the concept of Tummy Time, they may not understand the rationale for the positioning, may not know how to correctly implement Tummy Time, or may not persist with prone placement because of the infant's initial resistance to positioning (Zachry & Kitzmann, 2011).

Latino parents with limited English proficiency in South Carolina (SC) are a population at potential risk for not implementing Tummy Time effectively with their infants due to language barriers, cultural beliefs, poverty, challenges navigating the US healthcare system, and documentation status (Escarce & Kapur, 2006). The Latino community in SC has grown by 150% since 2000, the largest increase in any ethnic group (Brown & Lopez, 2013). As of 2010, 5% of South Carolinians identified as Latino, and of these, 47% were born outside of the US. Among foreign-born Latinos in the state, the majority (58%) were from Mexico, followed by Colombia, Cuba, Honduras, and Guatemala as the most commonly cited countries of origin (South Carolina Latino population statistics, 2010). The vast majority (72%) reported Spanish as the predominant language in the home (Demographic Profile of Latinos in South Carolina, 2014).

Compared to other racial/ethnic groups, Latinas in the US are less likely to receive early and adequate prenatal care than other ethnic

groups (McDonald, Suellentrop, Paulozzi, & Morrow, 2008). In SC, barriers to care include Latinas' limited access to health insurance and other resources such as health information, putting them at risk for poorer birth outcomes (Torres, Smithwick, Luchok, & Rodman-Rice, 2012). Young Latino parents and caregivers are more likely to employ high risk infant sleeping practices, including co-sleeping and prone positioning (Duzinski et al., 2013). Given the median age of Latinos in SC is 26 (Demographic Profile of Latinos in South Carolina, 2014), there was a clear need for a culturally and linguistically targeted and tailored Tummy Time educational intervention for Latinas in childbearing age.

### **Purpose**

The purpose of this feasibility study was to evaluate a culturally and linguistically appropriate, Spanish language version of Tummy Time education with limited English proficient Latinos, including parents, expectant parents, and other infant caregivers, such as grandparents, extended family members, or friends. Specific aims were to 1) adapt, implement, and evaluate a Spanish language educational Tummy Time intervention; 2) assess Tummy Time knowledge and confidence levels among Latino parents and caregivers exposed to the educational intervention; and 3) assess the efficacy and acceptability of the Spanish-language Tummy Time intervention among Latinos with limited English proficiency. This study, which ran from December 2015 through February 2016, was conducted in the large and growing Latino communities in both urban and rural communities. West Columbia (Richland County, urban) and Lancaster (Lancaster County, rural), South Carolina, experienced a 120% and 266% increase in the Latino population, respectively, from 2000 to 2011 (Demographic Profile of Latinos in South Carolina, 2011). Institutional Review Board (IRB) permission was obtained from the Office of Research Compliance at the University of South Carolina.

### **Design and Methods**

#### *Intervention Adaptation*

The Spanish-language intervention materials were adapted from culturally and linguistically adapted materials originally developed by an interdisciplinary health sciences student group. Known as the **Tummy Time Project (2015)**, this English-language intervention was developed and implemented with a goal of educating SC parents and caregivers in the prevention of torticollis and positional plagiocephaly.

The Spanish-language intervention team began the process of adapting the materials after receiving instruction on how to teach the intervention from Tummy Time Project representatives, as well as permission to translate the print materials. First, face validity of all print materials was determined by the second author (a certified pediatric nurse practitioner). As the target population originated from Mexico, two bilingual (English-Spanish) and bicultural (Mexico-US) research assistants, along with the first author, adapted and translated into Spanish an English-language Tummy Time brochure (Fig. 1) highlighting the rationale for Tummy Time and steps. They then completed the process for a pledge card (Fig. 2) to implement the intervention that the participants could share with the infant's primary healthcare provider. Finally, they translated into Spanish the AAP based (2016) pre- and post-intervention test, developed by Tummy Time representatives to evaluate existing knowledge and uptake of new information by English-language participants. All translated materials were subsequently back-translated and checked for accuracy by the second and third authors, both with backgrounds in medical translation.

#### *Participant Recruitment*

Participants were recruited from a Catholic church in Lancaster, SC; a Methodist church in Columbia, SC; a clinic offering obstetric services in Columbia, SC; and through snowball referrals. Organizational officials

Download English Version:

<https://daneshyari.com/en/article/5570023>

Download Persian Version:

<https://daneshyari.com/article/5570023>

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