Acceptability and Usefulness of a Web-Based Motivational Interviewing Session to Improve Nutrition and Oral Health Behaviors of Low-Income Children in Connecticut

Jaclyn Lerner, BSc; Kate Killion, MPH; Valerie Duffy, PhD
Department of Allied Health Sciences, University of Connecticut, Storrs, CT, United States

Abstract

Background: Obesity and dental decay are linked through poor diet. In the United States, >13% of 2-5-year-old children have obesity and >21% have tooth decay, with the highest rates in Black and Latino children and those from low-income families. Conflicting information, barriers, and lack of access to healthy food and dental care influence the risk of poor diet and insufficient oral hygiene. Of particular interest is whether leveraging technology can deliver tailored and motivational interventions to promote a healthier diet and oral hygiene behaviors in young children of high-need families.

Objective: This study aimed to determine the acceptability and usefulness of a web-based motivational interview (MI) and goal-setting session to promote healthy feeding and improve oral health in young children and to determine how an initial survey with tailored messages informs the session to improve the efficiency and effectiveness of goal-setting.

Methods: Low-income caregivers of children aged 2-6 years were recruited through multiple community agencies. The caregivers completed a web-based nutrition and dental health survey that delivered 2-3 tailored messages to motivate or reinforce healthier target behaviors for their children. Caregivers reported their willingness to change the target behavior of the messages and were invited to participate in an MI session via a web-based videoconference application, facilitated by trained dietitians and dietetics students. The facilitators used the messages received by the caregiver and their willingness to change, to inform the session. The facilitators also used principles of MI to provide evidence-based recommendations, address barriers to these recommendations, and determine feasible goals with participants.

Results: Of 142 caregivers who completed the initial survey, 83 indicated an interest in the MI session and were contacted. A total of 48 MI sessions were completed (41 with female participants and 24 with non-Hispanic White participants). Caregivers were willing to attempt to make 62 out of the 64 target nutrition behavioral improvements from the initial survey. A total of 24 out of 40 caregivers who received a tailored message to improve a nutrition behavior set a goal based on that message during the MI session. The most commonly set nutrition goals involved increasing vegetable consumption (n=25), increasing lean protein consumption (n=8), and serving healthier snacks (n=8), which highlighted the target behaviors that the caregivers deemed most relevant. Of those who provided feedback on the MI sessions (n=41), most strongly agreed (scale from strongly agree to strongly disagree) that the MI session was easy and convenient to attend (n=33), and the UConn nutritionist made them feel comfortable to talk about their children’s health (n=38), helped them think about why health changes may be important (n=32), and helped them set a goal for positive changes in their children’s health (n=34).

Conclusions: Our results indicate the acceptability and usefulness of a web-based MI and goal-setting session, and that an initial survey with tailored messages informed the goal-setting session.

Conflicts of Interest: None declared.

DOI: 10.2196/39300