PREDICTING SUGAR CONSUMPTION AMONG PRESCHOOL CHILDREN USING THE THEORY OF PLANNED BEHAVIOR

Maha Ali El Din Hamza*, Mona Hassan Ahmed**, Esam H. Ghoneim***

ABSTRACT

The constructs of the Theory of Planned Behavior (TPB), attitude, subjective norm, and perceived behavioral control, were assessed to examine their applicability and sufficiency in predicting intention and behavior of mothers to limit sugar consumption of their preschool children. Four hundred mothers were interviewed using a questionnaire designed to measure the components of the TPB. The behavior of limiting sugar consumption was assessed retrospectively by food frequency questionnaire containing a list of 25 sugar-containing food items and prospectively by 24-hour recall for three successive days following the initial interview. The TPB provided a significant prediction of intention ($R^2 = 0.299$), specifically with perceived behavioral control ($\beta = 0.302$) and subjective norms ($\beta = 0.261$). Frequency of past behavior of sugar consumption was explained mainly by attitude and perceived child's oral health (6.9 percent of variability in sugar consumption behavior). While the prospective behavior of sugar limitation could be predicted by intention (6.3 percent), mother's work (2.7 percent) and mother's age (1.5 percent). The results indicated that the TPB is applicable to the prediction of food choice-related intention and behavior among mothers of preschool children.

INTRODUCTION

The comprehension of sugar as part of preschool children's diet has many aspects. Sugar-containing foods and drinks are in part included in the common dietary pattern of the family, and they partly serve as reinforcement, comfort or substitute for care and attention towards the child.[1] However, there is an increased consensus that the frequency and duration of sugar intake are related to risk of chronic oral diseases such as dental caries.[2-5]

Evidence proved that the child's early experience with food and learned behavior in the family are crucial in the development of dietary patterns. These dietary behavioral patterns that have developed in early childhood may persist into adolescence and adulthood. For preschool children, their decision abilities are not yet well developed and their everyday experience with food is influenced by maternal beliefs about food. Studies proved that mothers play a key role in determining their children's health related behavior.[1,6] Thus, an understanding of criteria used by mothers to choose food for their children would facilitate the design of an intervention conductive to positive eating patterns for oral disease prevention.

The present study investigated the decision-making process involved when mothers make a specific food choice, namely, the limitation of sugar consumption of their preschool children. To achieve the aim of this study it was necessary to use an effective methodology in examining decision-making especially when the behavior in question was under volitional control. The framework developed by Ajzen and Fishbein[7] in their

* *Department of Pedontics and Community Dentistry, Faculty of Dentistry, Alexandria University, Egypt.*

** *Department of Biostatistics, High Institute of Public Health, Alexandria University, Egypt.*

*** *Central Lab for Food and Feed, Agric. Res. Center, Egypt.*