

Beyond reading recognition: understanding pediatric oral health literacy

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Background: 90 million Americans have low health literacy. Oral health literacy has not been studied extensively. The objective of this study is to evaluate the accuracy of reading recognition as an indicator of oral health literacy among low-income parents.

Methods: We created a three-part pediatric oral health literacy inventory to assess: reading recognition, vocabulary knowledge, and comprehension of oral health information in a cross sectional study. The inventory consists of 35 words and terms commonly used in pediatric dentistry. The items pertain to preventive dental care, oral hygiene, diet, caries process, and restorative dentistry. The inventory was administered to 45 English-speaking parents of children enrolled in Head Start or Early Head Start programs in western Washington.

Results: We tested the strength of associations among parents' reading recognition, vocabulary knowledge, and comprehension scores. Reading recognition was weakly and not significantly associated with vocabulary knowledge ($r = 0.29$, $p = .057$) or comprehension ($r = 0.28$, $p = .062$). Vocabulary knowledge was strongly associated with comprehension ($r = 0.80$, $p < .001$). Parent-reported child oral health status was not significantly associated with reading recognition, vocabulary knowledge, or comprehension, however parents with children at either end of the spectrum (Excellent or Fair/Poor ratings) had higher scores in all three components of the inventory.

Conclusions: Reading recognition, which has been used as a proxy for health literacy, is an inadequate indicator of pediatric oral health literacy. Oral health literacy is a multifaceted construct composed of skills including prose reading, listening comprehension, translation of information into practice, and the ability to ask questions and seek care as necessary. This expanded definition should be considered in evaluation of oral health literacy interventions.

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