

Assessing the relationship between caregivers' pediatric oral health literacy and children's caries status

David Avenetti

Purpose: The primary aims were to 1) determine if caregivers' oral health literacy is associated with children's caries status using two different oral health literacy instruments, 2) explore if parents' scores on these instruments are correlated, and 3) determine whether reading recognition or vocabulary knowledge is more strongly associated with caries status as defined by dmft scores.

Methods: This was a cross-sectional study of primary caregivers and their children, aged 3 to 6 years, conducted at a combined university-hospital dental clinic. Caregivers who consented completed an 18-item demographic and dental utilization survey, the Rapid Estimate of Adult Literacy in Dentistry (REALD-30), and the Oral Health Literacy Inventory for Parents (OH-LIP) Parts I and II. The administration of the REALD-30 and OH-LIP Parts I and II was audio-recorded for scoring and reliability testing. dmft scores were determined in the course of a full dental examination completed by a resident or faculty member in the Department of Pediatric Dentistry.

Results: Fifty-seven caregiver-patient pairs participated in this study. Correlations among the REALD-30, OH-LIP I, and OH-LIP II scores were very high ($p > 0.001$). Neither the REALD-30, OH-LIP I, nor REALD-30 scores were significantly associated with dmft scores in unadjusted or adjusted Poisson regression models. Caregivers' REALD-30 and the OH-LIP I scores were generally high, indicating most caregivers were able to recognize and pronounce dental terms. OH-LIP II scores revealed wide variation in the ability of caregivers to define pediatric dental terms, even though most could pronounce the terms correctly. Characteristics generally associated with increased word recognition and vocabulary knowledge include: caregivers who are English-speaking, have higher education levels, earn higher incomes, have private insurance, and perceive a higher oral health status for themselves and their children

Conclusions: These results indicate that the REALD-30 and the OH-LIP II may have wider internal and external validity than the OH-LIP I, given their strong correlation, association with numerous demographic and dental characteristics, and the REALD-30's marginal association with dmft scores. These findings suggest that the OH-LIP II may offer a clearer understanding of caregivers' oral health literacy. Since caregivers are primarily responsible for the oral health practices of young children, their oral health literacy levels can affect their children's oral health and caries experience.

Thesis Committee:

Penelope Leggott, DDS, MS (Chair)

Colleen Huebner, PhD, MPH

Travis Nelson, DDS, MSD, MPH

JoAnna Scott, PhD

This study was supported by the US Department of Health and Human Services, Health Resources and Services Administration's Maternal and Child Health Bureau (Title V, Social Security Act), grant #T76MC00011.

