

## **Over-the-counter Medication Use in a Community-based Sample of Preschool-age Children.**

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**Objectives:** Over-the-counter medications (OTCM) can be beneficial when used as indicated, but they might be used inappropriately as a substitute for dental care. Here, we examine the prevalence, types and correlates of OTCM reported by a community-based sample of preschool-age children who were participants of an epidemiologic study of early childhood oral health.

**Methods:** We used questionnaire and examination information obtained from 8,059 preschool-age participants in the ZOE 2.0 study (mean age=53 months) enrolled in North Carolina Head Start centers. Parents were asked to specify any OTCM their child had received within the last 30 days. Dental caries status was determined by using International Caries Detection and Assessment System (ICDAS) criteria. Early childhood caries (ECC) was defined as  $\geq 1$  tooth surfaces with caries lesions defined at the threshold of ICDAS $>2$ . Data were analyzed using descriptive statistics and bivariate (Chi-square) tests of association.

**Results:** Eighteen percent (n=1,470) of children used OTCM in the preceding 30 days, with 16% (n=1,304) using one or more of the five most frequent groups: analgesic (5%), cold and cough medication (5%), allergy medication (5%), anti-inflammatory (4%), vitamins/supplements (1%). Non-Hispanic whites were twice as likely (26%) to report receipt of OTCM compared to their African American (13%) and Hispanic (12%) counterparts (P<0.0005). A majority of children had ECC (54%) and one-third had untreated caries (36%), although neither condition was meaningfully associated with use of any OTCM groups.

**Conclusion:** While ECC was highly prevalence in this cohort, there was no evidence of recourse to OTCM to manage it.

Supported by: NIH/NIDCR U01-DE025046