

Title: A Pothole a Day Keeps the Dentist Away: Oral Health Disparities in Two States

Authors: Aimee Ballard, Laura Bernstein

Background/Purpose: Appalachia is at higher risk for diseases and poor health outcomes (WVDHHR, 2018), including oral health. Oral health predicts mortality (Paganini-Hill et al., 2011). In this study, we compare the association between location and tooth loss in different age groups in two states.

Methods: We used data from the 2020 Behavioral Risk Factor Surveillance Survey (BRFSS) from the Centers for Disease Control and Prevention (CDC) for West Virginia and Pennsylvania. We ran a cross tabulation using SPSS to examine the relation between location and age on the number of permanent teeth removed.

Results: Results of our cross tabulation were significant, χ^2 (DF = 3, N = 11178) = 470.5, $p < .001$. Among older adults (65+), 69.3% in WV experienced complete tooth loss, as compared to 30.7% of PA. These state-level differences are consistent across all levels of tooth loss in middle-aged (45-64) and older adults. The dataset for younger adults (18-44) with lost teeth is too small to draw conclusions.

Conclusions: Our results show a relation between location and oral health that was consistent across age groups. Increasing oral healthcare providers in WV would make access more available for residents.