

# Study explores the influence of social networks on oral health outcomes

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A study published in *JDR Clinical & Translational Research* aims to demonstrate the influence of social networks on oral health outcomes among women living in public housing in Boston, Massachusetts, USA.

The study, "Modeling Social Network Influences on Oral Health Outcomes among Women Living in Public Housing," by Brenda Heaton, et al., obtained individual- and network-level data from a cross-sectional survey of adult female residents of two public housing developments in Boston.

Participants responded to close-ended questions about sociodemographic characteristics, oral and general [health](#) status, and health-related behaviors for themselves as well as their named social contacts. Based on this information, network-level variables were calculated for each participant, including the proportion of the social network with certain characteristics or attributes.

To assess the salience of network measures in explaining the variability in self-reported oral health status, overall [health status](#), use of dental services within the last year, and current dental treatment needs, logistic regression models with individual-level covariates were compared with corresponding models that additionally included network-level variables with McFadden R<sup>2</sup> for comparison purposes.

Model comparisons for each outcome of interest demonstrated that adding network-level covariates significantly improved model fit. Additionally, network-level covariates displayed strong independent associations with the outcomes of interest.

The network proportion needing dental treatment was positively associated with participants' odds of reporting current dental treatment needs (odds ratio, 4.71; 95% CI, 1.47 to 15.05). An individual's odds of reporting no dental visit within the past year decreased with increasing exposure to social contacts with reported dental visits within the past year (odds ratio, 0.26; 95% CI, 0.07 to 0.89).

The study found that the salience of specific [network](#) attributes

depended on the outcome under study. Interventions aimed at reducing the poor oral health burden in this and similar population groups may benefit from integrating information on social networks, including tailoring intervention delivery and/or messaging to account for the potential influence of social networks.

**More information:** B. Heaton et al, Modeling Social Network Influences on Oral Health Outcomes among Women Living in Public Housing, *JDR Clinical & Translational Research* (2023). [DOI: 10.1177/23800844231182571](https://doi.org/10.1177/23800844231182571)

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