

Social Capital and Dental Pain in Brazil: A Multilevel Study

Bianca Santiago

Federal University of Paraíba, Brazil

Objectives: There is limited evidence on possible associations between social determinants and dental pain. This study investigated the relationship of neighborhood and individual social capital with dental pain in adolescents, adults and the elderly.

Methods: A population-based multilevel study was conducted involving 624 subjects from 3 age groups: 15-19, 35-44 and 65-74 years. They were randomly selected from 30 census tracts in three cities in the State of Paraíba, Brazil. A two-stage cluster sampling was used considering census tracts and households as sampling units. The outcome of study was the presence of dental pain in the last 6 months. Information on dental pain, demographic, socio-economic, health-related behaviors, use of dental services, self-perceived oral health and social capital measures was collected through interviews. Participants underwent a clinical examination for assessment of dental caries. Neighborhood social capital was evaluated using aggregated measures of social trust, social control, empowerment, political efficacy and neighborhood safety. Individual social capital assessment included bonding and bridging social capital. Multilevel logistic regression was used to test the relationship of neighborhood and individual social capital with dental pain after sequential adjustment for covariates.

Results: Individuals living in neighborhoods with high social capital were 52% less likely to report dental pain than those living in neighborhoods with low social capital (OR = 0.48, 95% CI = 0.27-0.85). Bonding social capital (positive interaction) was independently associated with dental pain (OR = 0.88, 95% CI = 0.80-0.91). Last dental visit, self-perceived oral health and number of decayed teeth were also significantly associated with dental pain.

Conclusion: Our findings suggest that contextual and individual social capital are independently associated with dental pain.

Keywords: Dental pain, epidemiology, oral health, social capital, socioeconomic factors.

Biography

Bianca Marques Santiago has completed her Ph.D. in Sciences at the age of 34 years from National School of Public Health (FIOCRUZ) and her Master in Dentistry (Pediatric Dentistry) from Federal University of Rio de Janeiro (UFRJ). She serves as Adjunct Professor of the Department of Clinical and Social Dentistry from Federal University of Paraíba, being responsible for three disciplines of the undergraduate course of Dentistry: Scientific Methodology, Forensic Dentistry and Dental Ethics and Law. He has published more than 20 papers in reputed journals and serving as an editorial board member of repute.

bianca.santiago@yahoo.com.br