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442 - COMPARISON OF ORAL HEALTH INDICATORS BETWEEN CHILE AND THE UNITED STATES OBTAINED FROM NATIONAL POPULATION SURVEYS BETWEEN 2015-2018: A CROSS-SECTIONAL STUDY

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Resumen

Background/Objectives: Oral health inequities persist worldwide. Cross-national comparisons can help identify patterns of inequality in oral health, yet evidence remains limited, particularly between Latin American and high-income countries. The aim of this study was to compare the oral health outcomes between Chile and the U.S. from national population surveys between 2015-2018, exploring inequalities by educational level.

Methods: A cross-sectional analysis was conducted using data of non-institutionalized persons ≥ 15 years) from Chile's 2016-2017 National Health Survey (ENS, n = 6,233) and the U.S. 2015-2018 National Health and Nutrition Examination Survey (NHANES, n = 12,790), which included comparable oral health measures. Outcomes included number of remaining teeth, teeth with untreated caries; time from the last dental visit, and the use of removable prostheses. Country sampling weights were applied to restore the representativeness of each sample, and we calculated means (standard deviation) or percentages depending on the type of variable, and their 95% confidence intervals.

Results: Chilean individuals were less likely to have visited a dentist within the past year than those in the US: 55.0% (95%CI 52.6-57.4) vs. 39.5% (95%CI 36.7-42.4). They have a lower mean number of remaining teeth and a higher mean number of untreated caries than US individuals: 22.5 (95%CI 22.1-22.9) vs. 24.8 (95%CI 24.5-25.2) and 1.4 (95%CI 1.3-1.5) vs. 0.8 (95%CI 0.7-0.9). The use of removable prosthesis

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was two times higher in Chile than USA: 22.4% (95%CI 20.6-24.4) vs. 11.8% (95%CI 10.5-13.2). Significant disparities were observed between high and low educational levels, with stronger gradient in Chile for mean number of remaining teeth (from 26.5 to 12.5, $p < 0.001$) than in USA (from 25.7 to 21.3, $p < 0.001$). In contrast, the gradient in the mean number of teeth with untreated caries across educational levels was less pronounced in Chile (from 1.4 to 1.2, $p = 0.06$) than in USA (from 1.3 to 0.5, $p < 0.001$).

Conclusions/Recommendations: The Chilean population presented worse oral health indicators compared with the U.S. population. The higher proportion of Chilean individuals who have not visited a dentist within the past year suggest that these differences can be attributed to lower access to comprehensive dental treatment, especially for individuals with lower educational level. These findings underscore the urgent need to advance public oral health policies and strengthen health benefits for individuals with lower educational attainment in both Chile and the U.S. in order to reduce oral health disparities.

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