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816 - CHILDHOOD OBESITY INEQUITIES IN SPAIN: AN INTERSECTIONAL MAIHDA ANALYSIS

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Resumen

Background/Objectives: Obesity inequities result from disproportional distribution of social determinants of health, such as socioeconomic position. Applying an intersectional framework can account for the independent and combined effects of these determinants on childhood obesity. We examined whether obesity inequities are patterned by age, sex/gender, parental occupation, and region, among children and adolescents who participated in the Spanish National Health Survey; and whether these inequities vary over time.

Methods: We analyzed data from 21,081 children and adolescents, aged 2-14 years old, from the 2003, 2006, 2011, 2017, and 2023 Spanish National Health Surveys. Using intersectional multilevel analysis of individual heterogeneity and discriminatory accuracy (I-MAIHDA) via logistic models with a random coefficient, we examined inequities in obesity across 84 intersectional strata, defined by sex/gender, age, parental education, and geographic region. We quantified the proportion of inequities explained by the additive and interaction effects across strata.

Results: The variance partition coefficient indicated that 17.3% and 16.7% of obesity inequities were explained by intersectional strata in 2003-2011 and 2017-2023, respectively, with the main additive effects accounting for 96.6% and 99.7% of the between-stratum variance in each time period. On average, girls and older children (aged 5 to 14 years) had lower odds of obesity, while children from lower socioeconomic backgrounds and living in the south (Andalucía, Murcia, Ceuta and Melilla) and the Canary Islands had greater odds of obesity. Regardless of time period,

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the predicted probabilities showed that boys, aged 2 to 4 years, those from low socioeconomic backgrounds, and those living in Canarias had the greatest probabilities of obesity.

Conclusions/Recommendations: In Spain, childhood obesity inequities are mainly explained by the average effects of age, sex/gender, socioeconomic background, and geographical region. However, deviations from these averages were observed. Applying proportionate universal interventions targeting children and adolescents at high-risk may be effective in preventing and tackling social inequities in obesity.

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