Changes in sitting time, screen exposure and physical activity during covid-19 lockdown in south american adults: A cross-sectional study

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Abstract
The worldwide prevalence of insufficient physical activity (PA) and prolonged sedentary behavior (SB) were high before the coronavirus (COVID-19) pandemic. Measures that were taken by governments (such as home confinement) to control the spread of COVID-19 may have affected levels of PA and SB. This cross-sectional study among South American adults during the first months of COVID-19 aims to (i) compare sitting time (ST), screen exposure, moderate PA (MPA), vigorous PA (VPA), and moderate-to-vigorous PA (MVPA) before and during lockdown to sociodemographic correlates and (ii) to assess the impact of lockdown on combinations of groups reporting meeting/not-meeting PA recommendations and engaging/not-engaging excessive ST (≥7 h/day). Bivariate associations, effect sizes, and multivariable linear regressions were used. Adults from Argentina (n = 575) and Chile (n = 730) completed an online survey with questions regarding demographics, lifestyle factors, and chronic diseases. Mean reductions of 42.7 and 22.0 min./day were shown in MPA and VPA, respectively; while increases of 212.4 and 164.3 min./day were observed in screen and ST, respectively. Those who met PA recommendations and spent <7 h/day of ST experienced greatest changes, reporting greater than 3 h/day higher ST and more than 1.5 h/day lower MVPA. Findings from the present study suggest that efforts to promote PA to South American adults during and after COVID-19 restrictions are needed.

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