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Title

Walking habits during the COVID-19 pandemic are associated with functional health among primary care patients

Priority 1 (Research Category)

Secondary data analysis

Presenters

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Abstract

Context: COVID-19 policies that restrict movement are an essential public health measure to reduce the spread of disease. However, these restrictions may lead to reduced physical activity. Little is known if these changes are associated with changes in physical or mental health. Objective: To examine the relationship between walking habits during COVID-19 and mental and physical health. Study Design: A cross-sectional analysis using patient survey data from a multi-center randomized control trial, Integrating Behavioral Health and Primary Care. Setting or Dataset: 44 Primary Care Practices in 13 states. Population studied: Adults with chronic medical (heart disease, diabetes, lung disease, or arthritis) and behavioral (mood disorder, insomnia, substance abuse, chronic pain, or irritable bowel syndrome) conditions. Outcomes measures: Patients completed an online survey assessing mental health and physical health as measured by the PROMIS-29®. Methods: Between March 2020 and February 2021, we obtained cross-sectional, self-reported demographic, health, and walking data from 2,919 adults in primary care with multiple chronic health conditions. We examined whether the perceived amount of time engaged in walking was different compared to pre-pandemic levels, and if this was associated with PROMIS-29 mental and physical health summary scores. Multilevel models controlling for age, sex, race, income and number of chronic conditions with a random intercept for primary care practice were used to assess this association. Results: Of 2,645 participants who walked before the pandemic, 9% reported more walking, 28% reported less, and 52% reported the same amount compared to pre-pandemic levels. After adjustment, patients who reduced walking had significantly lower mental ($\beta=-2.2$; 95% CI -2.9, -1.5) and physical ($\beta=-1.7$; 95% CI -2.4, -0.9) health scores compared to those who walked the same or more. Conclusions: Adults who have walked less since the COVID-19 pandemic began have worse mental and physical health compared to those who walked the same or more. Nearly one-third of individuals are walking less than before the COVID-19 pandemic and reductions in walking are negatively associated with mental and physical health. Promotion of physical activity should be taken into consideration when mandating restrictions to slow the spread of disease.