

The Impact of Unconditional Cash Transfers on Health Outcomes in the United States

Researchers:

Alex Bartik

David E. Broockman

Patrick Krause

Sarah Miller

Elizabeth Rhodes

Eva Vivalt

J-PAL office: J-PAL North America

Sample: 3,000 adults

Outcome of interest: Alcohol, tobacco, and drug use Food security and nutrition Health outcomes Mental health

Intervention type: Cash transfers

AEA RCT registration number: AEARCTR-0006750

Research Papers: Does Income Affect Health? Evidence from a Randomized Controlled Trial of a Gua...

Individuals with low incomes have worse health outcomes than their wealthier counterparts. To test whether increasing income can improve health, researchers evaluated the impact of a US\$1,000 monthly unconditional cash transfer to individuals with low incomes for three years on health outcomes including nutrition, sleep, health care access and use, and physical and mental health. Those who received the large cash transfer spent more on medical care, visited the emergency department and hospital more often, may have used more dental care, and had large but short-lived improvements in their stress and food security. The large cash transfer had no impact on their sleep quality, exercise frequency, self-reported access to health care, or physical health, nor did it affect mental health after the first year.

□□□□□□

□□□□□□

Individuals with low incomes in the United States have worse health outcomes and a shorter life expectancy than their wealthier counterparts.¹

There are a few proposed hypotheses for explaining the relationship between income and health. Given the lack of a universal healthcare system in the United States, individuals with low incomes often have limited access to health care services, which can impede them from seeking the care they need to improve their health.² Individuals with low incomes face more challenges in finding time to engage in health-promoting behaviors, such as exercise, sleep, or purchasing healthy foods.^{3, 4} Having a low income is also hypothesized to affect biological health by increasing physiological stress; studies have found that people with low incomes have increased stress and inflammation levels.⁵

Although there are multiple hypothesized mechanisms of the relationship between health and income, there is a dearth of rigorous research on the causal impact of income on health. Therefore, in this randomized evaluation, researchers investigated

the impact of increasing an individual's income on health.

□□□□ □□□□□□

The researchers worked with two nonprofit organizations that recruited adults with low-incomes in Illinois and Texas into the study. The researchers identified rural, urban, and suburban counties that were demographically representative from which to recruit participants. Participants were all between the ages of 21 and 40 at the time of recruitment and had a total household income at or below 300 percent of the Federal Poverty Level.

The program participants reported high health needs at the time of enrollment. Twenty-nine percent were uninsured, 27 percent reported that they had previously skipped care due to cost, and more than half reported "poor," "fair," or "good" health rather than "very good" or "excellent" health.



Woman is in the aisle of a pharmacy looking at the products.

Photo: Shutterstock.com

□□□□□□ □□□□□□ □□ □□□□□□

Researchers evaluated the impact of receiving US\$1,000 of unrestricted cash per month for three years on a variety of health outcomes. Individuals in the comparison group received US\$50 per month for the same period of time. These monthly payments were not conditional on participant behavior or study participation. Individuals in both groups also received separate payments to encourage survey responses.

1,000 participants were randomly assigned to receive US\$1,000 per month ("large cash transfer" intervention group) and 2,000 were randomly assigned to receive US\$50 per month (comparison group). The partnering nonprofit organizations recruited participants through direct mailers and ads on Facebook, Instagram, and FreshEBT, an app that allows SNAP recipients to check their accounts and benefits.

The researchers were interested in a variety of health outcomes that can be broadly classified into health inputs and health outputs. Health inputs are the resources and behaviors that influence a person's health, including nutrition, exercise, sleep quality, access to and use of health care services, insurance coverage, and alcohol and drug use. Health outputs refer to physical and mental health outcomes including self-reported mental and physical health, and biomarkers including blood pressure, cholesterol, BMI, and mortality.

Researchers collected data using surveys, a phone app, administrative data, and blood draws. Shorter monthly surveys and in-depth midline and endline surveys asked participants about their physical and mental health, health care access and utilization, and their behaviors. In addition to the traditional surveys, participants used a phone app to input their eating, sleeping, and exercising habits. Participants had financial incentives for completing the phone app tasks. With the consent of participants, the researchers also analyzed administrative records on credit reports and mortality. Some participants also participated in blood draws to measure their biomarkers related to diabetes, cholesterol, and inflammation.

In addition to receiving ethical review and approvals from an institutional review board, the researchers and implementing nonprofit organizations took a number of steps to reduce the risk of harm to participants. Receipt of the cash transfers was not conditional on research participation. The nonprofit organizations provided the cash transfers as an unconditional gift, so the transfers were not subject to an income tax. The nonprofit organizations also worked with state benefit offices to make sure the cash transfer did not affect participants' eligibility for public benefits, whenever possible. At the end of the cash transfer program, participants were provided with information to help them transition on to public benefits if eligible, and staff of the nonprofit implementing organizations were available to refer them to resources where relevant.

□□□□□□ □□□□□□ □□□□□□□□ □□□□ □□□□□□□□

Participants who received US\$1,000 ("large cash transfer") spent US\$20 more per month on medical care, went to the emergency department and hospital more, may have used more office-based care such as dental care, and had a large, but short-lived improvements in their stress and food security compared to those in the comparison group. The large cash transfer did not affect the participants' sleep quality, exercise frequency, self-reported access to health care services, insurance coverage, alcohol and drug use, or physical health, nor did it affect mental health after the first year.

Health inputs

Health inputs include an individual's behaviors or actions that can affect health. The large cash transfer led to improvements in participants' food security in the first year, a 0.30 percentage point increase (a 7.5 percent increase from a baseline of 3.9 percent), but this effect faded in the following years. People who received the transfer reported a five minute (10 percent from a baseline of fifty minutes) decrease in weekly exercise in the survey, but this difference was not reflected in their time diaries. Those in the large cash transfer group may have used more dental care by 4.9 percentage points from a baseline of 48 percent (a 10 percent increase).

Those in the intervention group spent US\$20 more on medical care from a baseline of US\$177 (a 12 percent increase) They were also more likely to go to the emergency department in the last year by 2.5 percentage points from a baseline of 24 percent (a 10 percent increase) and had more emergency department visits by 11 percentage points from a baseline of 58 percent (a 19 percent increase). Participants in the intervention group had a higher number of hospitalizations, a 5.4 percent percentage point increase from a baseline of 23 percent (a 23 percent increase).

Participants who received the large cash transfer experienced no change in their sleep quality, exercise frequency, self-reported access to health care, insurance coverage, and alcohol and drug use.

Health outputs

Health outputs include physical and mental health outcomes. Participants in the intervention group experienced lower stress (a 0.64 point improvement from a baseline of 18.55 points, a 3.4 percent decrease) and mental distress (a 0.70 point improvement from a baseline of 9.43 points, a 7.5 percent decrease) in the first year, but this effect did not persist in the second year. There was no change in the self-reported physical health, the range of biomarkers measured, and mortality for participants who received the large cash transfer.

The results suggest that a US\$1,000 monthly cash transfer for three years might not be sufficient to address the health care challenges of people with low incomes. While there were some improvements and changes in the health outcomes of the participants, as a policy tool, unconditional cash transfers alone might not be targeted enough to improve the health outcomes of people with low incomes.

Miller, Sarah, Elizabeth Rhodes, Alexander W. Bartik, David E. Broockman, Patrick K. Krause, and Eva Vivalt. 2024. "Does Income Affect Health? Evidence from a Randomized Controlled Trial of a Guaranteed Income." Working Paper. Working Paper Series. National Bureau of Economic Research. <https://doi.org/10.3386/w32711>.

1. Chetty, Raj, Michael Stepner, Sarah Abraham, Shelby Lin, Benjamin Scuderi, Nicholas Turner, Augustin Bergeron, and David Cutler. 2016. "The Association Between Income and Life Expectancy in the United States, 2001-2014." *JAMA* 315 (16): 1750-66. <https://doi.org/10.1001/jama.2016.4226>.
2. Miller, Sarah, and Laura R. Wherry. 2019. "Four Years Later: Insurance Coverage and Access to Care Continue to Diverge between ACA Medicaid Expansion and Non-Expansion States." *AEA Papers and Proceedings* 109:327-33.
3. Grandner, Michael A., Nirav P. Patel, Philip R. Gehrman, Dawei Xie, Daohang Sha, Terri Weaver, and Nalaka Gooneratne. 2010. "Who Gets the Best Sleep? Ethnic and Socioeconomic Factors Related to Sleep Complaints." *Sleep Medicine* 11 (5): 470-78. <https://doi.org/10.1016/j.sleep.2009.10.006>.
4. Allcott, Hunt, Rebecca Diamond, Jean-Pierre Dubé, Jessie Handbury, Ilya Rahkovsky, and Molly Schnell. 2019. "Food Deserts and the Causes of Nutritional Inequality*." *The Quarterly Journal of Economics* 134 (4): 1793-1844. <https://doi.org/10.1093/qje/qjz015>.
5. Baum, A., J. P. Garofalo, and A. M. Yali. 1999. "Socioeconomic Status and Chronic Stress. Does Stress Account for SES Effects on Health?" *Annals of the New York Academy of Sciences* 896:131-44. <https://doi.org/10.1111/j.1749-6632.1999.tb08111.x>.