The Relationship Between Economic Stability and Cardiovascular Disease

Olivia Chanel Loustaunau Ward
Palm Springs, California

ABSTRACT:

Background

Economic stability can have a major effect on cardiovascular health. This paper looks at how financial stress, income, and economic hardship are related to cardiovascular disease and whether these factors increase a person's risk of developing heart problems.

Methods

This narrative review included five original research articles found using the PubMed database. The articles focused on the relationship between economic stability and cardiovascular disease and were selected using search terms related to financial stress, income, poverty, and heart disease.

Results

Overall, the studies found that people with lower or unstable incomes were more likely to develop cardiovascular disease or have risk factors for heart disease. Financial stress and economic hardship were also linked to worse heart health, and several studies found that racial and ethnic minority groups experienced higher rates of cardiovascular disease.

Discussion

These findings show that economic stability is an important factor in cardiovascular health. I think reducing financial stress and improving access to resources could help lower the risk of heart disease, but more research is still needed to better understand these relationships.

INTRODUCTION:

Significance of the Problem

Cardiovascular disease (CVD) is one of the leading causes of death in the United States and affects millions of people every year [1]. While things like diet, exercise, and family history are well known risk factors, research has shown that a person's financial situation can also affect their heart health [1]. People with lower incomes or ongoing financial stress may have a harder time paying for healthcare, buying healthy foods, or getting the medications they need, which can increase their risk of cardiovascular disease [1]. Because of this, it is important to understand how economic stability can affect heart health.

Even though many studies have looked at economic stability and cardiovascular disease, they all focus on different parts of the topic. Some studies look at financial stress, while others focus on income changes, income inequality, or socioeconomic status [2]. One study found that people with moderate to high financial stress were more likely to develop coronary heart disease than those with little or no financial stress [2]. Another study found that people with greater income changes over time had a higher risk of cardiovascular disease and death [4]. The purpose of this paper is to review research on financial stress, income, and socioeconomic status to better understand how economic stability affects cardiovascular disease.

Objectives

The research question for this paper is: What is the relationship between economic stability and cardiovascular disease? This paper reviews research on different parts of economic stability, including financial stress, income level, income changes, and socioeconomic status to see how they are connected to cardiovascular disease. Understanding this relationship can help researchers and healthcare providers better recognize how financial challenges may affect heart health and why these factors should be considered when preventing cardiovascular disease.

METHODS:

This study was a narrative review that examined the relationship between economic stability and cardiovascular disease. Five articles were found using the PubMed database with the search terms **"**financial stress" and "heart disease", "income inequality" and "cardiovascular disease", "socioeconomic status" or income or poverty and "cardiovascular disease". Articles were included if they were original research studies involving human participants that focused on economic stability and cardiovascular disease. Review articles, animal studies, and studies that did not address economic stability or cardiovascular disease were excluded.

RESULTS:

Overall, the studies found that people with lower or unstable incomes were more likely to have cardiovascular disease or risk factors for heart disease [1-5]. Financial stress, income changes, and economic hardship were all linked to worse heart health, Several studies also found that racial and ethnic minority groups experienced higher rates of cardiovascular disease, even across different income levels [1-5].

Two studies found that financial stress was associated with a higher risk of cardiovascular disease [2,3]. One study reported that chronic stress caused by financial difficulties increased the risk of strokes, coronary heart disease, myocardial infarction, and heart failure [3]. Another study found that Black adults with moderate to high financial stress were more likely to develop coronary heart disease than those who reported little or no financial stress [2].

The studies also showed that unstable income was linked to poorer cardiovascular health [1,4]. One study found that adults who experienced large income changes or income drops over time had almost twice the risk of developing cardiovascular disease and a higher risk of death compared with adults who had stable incomes [4]. Another study found that racial and ethnic differences in cardiovascular disease remained across all income levels, with Black adults having higher rates of diabetes, hypertension, obesity, congestive heart failure, and stroke than White adults [1].

The final study examined cardiovascular disease deaths in California between 1999 and 2021 [5]. Although overall cardiovascular death rates decreased for many years, death rates increased after the pandemic [5]. The highest death rates were seen among men, non-Hispanic Black individuals, American Indian or Alaska Native individuals, Native Hawaiian or Pacific Islander individuals, Asian individuals, and lower income populations [5].

DISCUSSION:

Overall, these studies answered my research question by showing that economic stability has a major impact on cardiovascular disease [1-5]. People who experienced financial stress, unstable income, or lower income were more likely to develop heart disease or have worse heart health [1-5]. I expected to see a relationship between income and cardiovascular disease, but I was surprised by how consistent the findings were across all five studies. Even though each study looked at the topic a little differently, they all showed that economic hardship was linked to poor cardiovascular health.

Racial and ethnic minority groups, especially Black adults, experienced higher rates of cardiovascular disease, hypertension, diabetes, stroke, and heart failure even after income was taken into account [1, 5]. This suggests that economic stability is important, but it is not the only factor that affects cardiovascular disease. Other things like access to healthcare, chronic stress, and social conditions likely play a role as well [1-5]. These findings were similar across the articles, which made the overall results stronger [1-5].

This review is limited in that it only included five studies, so it does not systematically represent all the data published on this topic. Additionally, most of the studies were observational, showing that economic stability and heart disease are related, but not that one directly causes the other. Even with these limitations, the evidence shows that improving economic stability and reducing financial stress could lower the risk of cardiovascular disease. More research should continue looking at ways to reduce these health disparities and improve heart health for vulnerable populations.

REFERENCES:

1. Talha, K. M., Waqar, E., Johnson, H. M., Shapiro, M. D., Nambi, V., Virani, S. S., Mehta, A., Nasir, K., Hall, M. E., Abramov, D., & Minhas, A. M. K. (2024). Relationship

between race, income-level, and Cardiovascular Disease. *Journal of the National Medical Association*, *116*(5), 539–552.

2. Moran, K. E., Ommerborn, M. J., Blackshear, C. T., Sims, M., & Clark, C. R. (2019). Financial Stress and Risk of Coronary Heart Disease in the Jackson Heart Study. *American journal of preventive medicine*, *56*(2), 224–231.
3. Ma, L., Lv, M., Li, Y., Yang, C., Li, W., Sun, J., Han, T., Guo, Z., Li, D., Yan, Z., Li, R., & Zhang, L. (2025). Chronic financial stress and cardiovascular disease risk: A prospective cohort study and Mendelian randomization analysis. *Atherosclerosis*, *408*, 120460.
4. Elfassy, T., Swift, S. L., Glymour, M. M., Calonico, S., Jacobs, D. R., Jr, Mayeda, E. R., Kershaw, K. N., Kiefe, C., & Zeki Al Hazzouri, A. (2019). Associations of Income Volatility With Incident Cardiovascular Disease and All-Cause Mortality in a US Cohort. *Circulation*, *139*(7), 850–859.
5. Bhatta, D. N., & Bommer, W. (2024). Trends in California Cardiovascular Disease Mortality: Sex-Race/Ethnicity Disparity and Income Inequality. *Mayo Clinic proceedings*, *99*(11), 1756–1770.
6. M Talha, K., Almas, T., Minhas, A. M. K., Salah, H., Jamil, A., Johnson, H. M., Jain, V., Antoine, S., S Khan, S., & Khan, M. S. (2024). Disparities in heart failure between White, Black, and Hispanic young adults: insights from the National Health and Nutrition Examination Survey. *Therapeutic advances in cardiovascular disease*, *18*, 17539447241239814.