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In Sickness and In Health: Effects of Cardiovascular Health Shocks on Spouses' Work and Earnings

Fransoo, R^{1,2}

¹CIHI

²MCHP

Introduction

A severe health shock can threaten a patient's life and alter the lives of their family. Spouses often provide care, and may change their work situation, affecting family income. This could mean less work to allow for more caregiving, or more work to make up for the patient's lower income.

Conclusion/Implications

Despite known decreases in work and earnings among patients experiencing heart attack, cardiac arrest, or stroke, the proportion of spouses whose work and earnings were increased, decreased, or unchanged was the same as for control spouses. This combination implies a significant reduction in family income after serious health events.

Objectives and Approach

We used the Canadian Hospital and Taxation Database to quantify the impact on workforce participation and changes in earnings among spouses of working-age Canadians who survived a heart attack, cardiac arrest, or stroke. All 40-61 year-olds who experienced a health shock between 2005 and 2010, and survived for at least 3 years, were included, along with their spouses. We use 15 variables to match case spouses with up to 5 (weighted) potential control spouses. The main outcome was Total earnings, which included the sum of wages and salaries, net self-employment income and other employment income, normalized to 2012 Cdn dollars.

Results

Our analysis included 11,208 spouses of heart attack patients, 622 spouses of cardiac arrest patients, and 2,228 spouses of stroke patients, matched with spouses in the control group. For all three health shocks, we found no significant difference in the distribution of changes in earnings between cases and matched controls ($p=0.30$ for heart attack; $p=0.72$ for cardiac arrest and $p=0.27$ for stroke). We also found no difference in levels of working status (ie being employed). We found mixed impacts by spouses' sex, age, and pre-event earnings for heart attack and stroke patients. These results are consistent with previous findings, but drill deeper by analyzing the distributions of changes in earnings among spouses of patients experiencing health shocks.

