



Research Brief

The association between secondary conditions and indirect costs after spinal cord injury

Introduction

Spinal cord injury (SCI) not only results in direct costs of medical care expenses, but also indirect costs including losses in wages, fringe benefits, and productivity. Those with SCI also experience a lifelong increased risk of developing secondary health conditions (SHC), such as pressure injuries and urinary tract infections. SHC can result in a lower quality-of-life and diminished life expectancy.

The objective of this study was to identify the association between SHC and the indirect costs of traumatic spinal cord injury (SCI) based on the pre-injury and post-injury changes in employment and earnings. We had 304 participants.

Key Findings

- Most participants (78%) had at least one SHC.
- The average annual indirect costs among participants were \$29,293 in US dollars.
- Having one or more SHC was associated with \$5,074 indirect costs on average.
- After controlling for demographics, bowel accidents were associated with \$13,956 more indirect costs, urine accidents associated with \$10,806 more indirect costs, pressure injuries associated with \$20,666 more indirect costs, and depressive disorder associated with \$13,356 more indirect costs.
- Older age was also associated with higher indirect costs.

Conclusion

The results suggest that SHC, specifically bowel accidents, urine accidents, pressure injuries, and depressive disorder are associated with higher indirect costs. Health issues are barriers to employment and add to the likelihood of indirect costs (including losses in wages) and poverty. Many people with SCI live in poverty, and therefore, high levels of indirect costs due to lost earnings is of significant concern. The prevention of SHC may not only improve the quality-of-life and health status of people with SCI, but also relates to better economic consequences for individuals, their families, and society.