

# Informal caregiver burnout and its effect on depression and subjective physical health

Stephanie DiGiorgio, PharmD Candidate 2023

St. John's University College of Pharmacy and Health Sciences

## Background

- Informal caregiving involves individuals providing voluntary care to a loved one requiring need due to illness, disability, or any condition causing a loss of autonomy.<sup>1</sup>
- Caregiver burnout is the response to stress caused by caregiving, which displays as a **tridimensional syndrome**.<sup>2</sup>
- The three dimensions include emotional exhaustion, depersonalization, and personal accomplishment.<sup>2</sup>
- Personal accomplishment is the positive dimension of caregiving, which tends to be reduced when the other two dimensions are heightened.
- Identifying the tridimensional structure of caregiver burnout aids in understanding the effects, including poorer mental and physical health of the caregiver.

## Introduction

- Informal caregiving can be highly demanding, which may lead to impairment of the caregiver's physical, mental, and social health.<sup>1</sup>
- The consequences of this impairment based on the caregiver's assessment of the caregiving stress is referred to as **subjective burden**.<sup>2</sup>
- Subjective burden is used as a mediator between the demands and outcomes of caregiving.
- Informal caregiver burnout is associated with depression; the more caregivers report burnout, the more at risk for depression.<sup>1</sup>
- A self-reported decline in physical health along with an increase in physical symptoms and medication usage is more common in informal caregivers than non-caregivers.
- This health decline is most often tied to emotional exhaustion, which mostly results in physical exhaustion and a worsened well-being.<sup>1</sup>
- Caregivers who report a higher level of burnout are more prone to an increase in depression and a decrease in subjective health.<sup>1</sup>

## Objective

- The purpose of this retrospective analysis includes assessing the relationship between informal caregiving and informal caregiver burnout resulting in depression and a worsened subjective physical health.

## Method

- A database search was conducted to examine primary and secondary literature including data relevant to informal caregiving and its effect on depression and subjective health.
- A retrospective analysis of voluntary patient surveys was conducted to determine the role of caregiver burnout in harmful outcomes for the caregiver.

## Discussion

- An online survey was provided to multiple sources of informal caregiving associations, including websites, forums, and social media for distribution to caregivers.
- Inclusion criteria involved caregivers that are currently providing informal care to someone they know.
- The original total of people included was 505. After 6 people were excluded, the final sample size was 499.<sup>1</sup>
- The sample contained mostly people of Belgian (233) or French (249) nationalities caring for a spouse (114), child (195), parent (97) or other (93).<sup>1</sup>
- The mean caregiver age was 53 years old, with a majority being **female** (438) and either a full-time worker (136) or retired (141). The mean care-recipient's age was 49.<sup>1</sup>
- Informal caregiver burnout was measured using the three dimensions, where a higher score in emotional exhaustion and depersonalization and a lower score in personal accomplishment reflected a higher caregiver burnout.
- A higher score in the subjective health survey represents a better perceived health, and a higher score on the depression survey indicated a higher rate of depression.<sup>1</sup>

## Results

- Linear regression models were used to determine the predictive role of the tridimensional burnout syndrome on the continuous variables, depression and subjective health, based on answers from the **Maslach Burnout Inventory (MBI)**.
- The first model, shown in Table 1, display that the three dimensions of burnout were significantly associated with depression ( $p < 0.001$ ).<sup>1</sup>
- Emotional exhaustion ( $\beta = 0.53$ ) and depersonalization ( $\beta = 0.09$ ) were significant risk factors for depression. Personal accomplishment was a protective factor for depression ( $\beta = -0.19$ ).<sup>1</sup>
- Shown by the Beta Coefficient, for every one-point increase in emotional exhaustion MBI score, the likelihood of depression increases by 0.53 (Table 1).
- The second model displayed that for subjective health, including the three dimensions of burnout was a significant predictor ( $p < 0.001$ ).<sup>1</sup>
- Emotional exhaustion presented as the **only** significant risk factor for low subjective health (Table 2), therefore showing that the higher reported emotional exhaustion, the lower the caregiver's subjective health.<sup>1</sup>

**Table 1. Linear Regression Model of the Three Burnout Dimensions and Caregiver Depression**

Burnout Dimensions	Beta Coefficient	P-Values
Emotional Exhaustion	0.53	$p < 0.001$
Depersonalization	0.09	$p < 0.034$
Personal Accomplishment	-0.19	$p < 0.001$

**Table 2. Linear Regression Model of the Three Burnout Dimensions and Caregiver Subjective Health**

Burnout Dimensions	Beta Coefficient	P-Values
Emotional Exhaustion	0.36	$p < 0.001$
Depersonalization	0.01	$p > 0.05^*$
Personal Accomplishment	-0.20	$p > 0.05^*$

\*Statistically insignificant

## Conclusion

- A limitation of this study is that it would have been more valuable in a longitudinal format, investigating the association between burnout and the results over a period of time.
- There was a lack of diversity being that the sample consisted mostly of women and did not include information on gender issues in this context.<sup>1</sup>
- The results displayed shows a clear association between informal caregiver burnout and a decline in the caregiver's mental and physical health.
- This association highlights the need for attention to informal caregiver stress and how it contributes to depression and emotional exhaustion as well as a decline in the caregiver's subjective health.<sup>1</sup>

## Recommendations

- As healthcare professionals, it is our duty to provide care to not only our patients, but the persons affected by our patients' conditions.
- Provide education to your patients' caregivers regarding their condition, their medications, side effects, and other considerations regarding the patients' conditions.
- Listen to caregivers' concerns, feelings, and needs and provide them with understanding and resources to ease their stress from informal caregiving.
- Encourage your patients' caregivers to care for themselves as well by promoting physical activity and providing guidance in reducing negative behaviors.
- Keep yourself informed on specific resources available for patients and families dealing with specific disease states (e.g., National Parkinson Foundation).<sup>3</sup>

## References

1. Gérain P, Zech E. A Harmful Care: The Association of Informal Caregiver Burnout With Depression, Subjective Health, and Violence. *J Interpers Violence*. 2022;37(11-12):NP9738-NP9762. doi:10.1177/0886260520983259
2. Gérain P, Zech E. Informal Caregiver Burnout? Development of a Theoretical Framework to Understand the Impact of Caregiving. *Front Psychol*. 2019;10:1748. Published 2019 Jul 31. doi:10.3389/fpsyg.2019.01748
3. Krishnan S, York MK, Backus D, Heyn PC. Coping With Caregiver Burnout When Caring for a Person With Neurodegenerative Disease: A Guide for Caregivers. *Arch Phys Med Rehabil*. 2017;98(4):805-807. doi:10.1016/j.apmr.2016.11.002