Project Title

Psychosocial Factors and Caregiver Burden Among Primary Family Caregivers of Frail Older Adults with Multimorbidity

Project Lead and Members

Project lead: Dr Gabriel Ding

Project members: De Roza Jacqueline Giovanna, Chan Cheuk Ying, Dr Lee Eng Sing, Koh Hui Li

Organisation(s) Involved

National Healthcare Group Polyclinics

Healthcare Family Group Involved in this Project

Medical, Nursing, Healthcare Administration

Specialty or Discipline (if applicable)

Family Medicine, Clinical Research Unit

Project Period

Start date: July 2020

Completed date: February 2021

Aims

To examine psychosocial factors associated with burden among family caregivers of frail older adults with multimorbidity.

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Lessons Learnt

Our study showed that psychosocial factors, particularly higher perceived social support and caregiving competence, were significantly associated with lower odds of caregiver burden. Strategies to improve social support network, increase accessibility to community resources and enhance positivity with competency training may help ease caregiver burden. Understanding caregivers' perspectives and needs is essential to ensure effectiveness of targeted interventions.

Conclusion

Our study illustrated that psychosocial factors (perceived positive aspects in caregiving, caregiving competence and social support) influenced caregiver burden among older adults with frailty and multimorbidity. However, it did not highlight particular demographic factors that contributed to caregiver burden. Increasing care dependence and longer time spent in caregiving per week significantly increased caregiver burden in our study.

Additional Information

Challenges:

Recruitment were challenging as our study was conducted during the COVID-19 pandemic when physical patient attendance in the primary care clinics was reduced.

Note: This project attained the Merit award (Category: Singapore Primary Care Research Award (Poster)) at the Singapore Health & Biomedical Congress (SHBC) 2021

Project Category

Care Continuum, Primary Care

Keywords

Caregiver Burden, Frailty, Older Adults

Name and Email of Project Contact Person(s)

Name: Chan Cheuk Ying

Email: cheuk_ying_chan@nhgp.com.sg

Psychosocial factors associated with caregiver burden among family caregivers of frail older adults with multimorbidity: A cross sectional study in primary care

Chan C Y, De Roza J G, Ding T Y Gabriel, Koh H L, Lee E S

National Healthcare Group
POLYCLINICS

Background:

Caregiving for frail older adults with multi-morbidity poses burden, which may be mediated by perceived competence, positivity and social support.

Aim:

1. To determine differences in caregiving giving competency, perceived positive aspects of caregiving and social support between family caregivers of frail older adults with multimorbidity (MM) who perceived burden versus those who did not perceive burden.

2. To examine psychosocial factors associated with burden among family caregivers of older adults

Methodology:

Design: A descriptive cross-sectional study
Sample: Convenience sample of primary family caregivers of frail multi-morbid older adults
Study sites: Two primary care clinics in Singapore
Study period: Jul 2020- Feb 2021 (8 months)
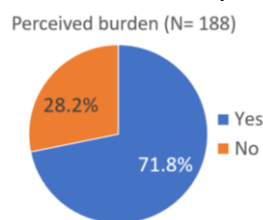**Data collection:** Interviewer- administered questionnaires

- Caregiver's demographic (age, gender, race, education, working status, living arrangement, alternative caregiver, use of community resource)
- Care recipients medical conditions, Clinical Frailty Scale (CFS score)[1]
- 12- item Zarit Burden Index (ZBI)[2]
- Caregiving Competence Scale (CCS)
- Short-version Positive Aspects of Caregiving (S-PAC)[3]
- Modified Medical Outcomes Study Social Support Survey (mMOS-SS)[4]

Data analysis:

Mann-Whitney U was used to compare differences between caregivers' burden as measured by ZBI, with cut-off of 10 indicating burden perceived. Multivariable analysis was used to determine factors associated with caregiver burden.

Results:

Out of 188 caregivers, 71.8% perceived burden. Majority were female (64.9%), median age was 62 years and 67% lived with their care recipients. 61.2% had help from alternative caregivers, but only 20.2% utilized community resources.

Perceived burden (N= 188)

28.2% ■ Yes
71.8% ■ No

Table 1. Shows comparison of perceived caregiving competency, positive aspects of caregiving and social support between caregivers who perceived versus did not perceive burden.

Table 1	Burden not perceived Mean (SD)	Burden perceived Mean (SD)	p- value
Perceived Caregiving Competency Scale (CCS)	11.6 (2.56)	10.0 (2.81)	
Perceived Positive Aspects of Caregiving (S-PAC)	29.8 (3.84)	26.8 (4.76)	<0.001
Perceived Social Support (mMOS-SS)	31.4 (5.45)	24.8 (8.54)	

Only social support remained significant in multivariable analysis (p<0.001).

Discussion:

Psychosocial factors, particularly social support, was significantly associated with caregivers' burden. Strategies to improve social support network, increase accessibility to community resources and enhance positivity with competency training may help ease caregiver burden.

Reference
1. Rockwood, K., Song, X., MacKnight, C., Bergman, H., Hogan, D. B., McDowell, I., & Mitnitski, A. (2005). A global clinical measure of fitness and frailty in elderly people. *Cmaj*, *173*(5), 489–495.
2. Ojifinni, O. O., & Uchendu, O. C. (2018). Validation and reliability of the 12-item Zarit Burden Interview among informal caregivers of elderly persons in Nigeria. *Archives of Basic and Applied Medicine*, *6*(1), 45.
3. Siow, J. Y. M., Chan, A., Østbye, T., Cheng, G. H.-L., & Malhotra, R. (2017). Validity and reliability of the positive aspects of caregiving (PAC) scale and development of its shorter version (S-PAC) among family caregivers of older adults. *The Gerontologist*, *57*(4), e75–e84.
4. Moser, A., Stuck, A. E., Silliman, R. A., Ganz, P. A., & Clough-Gorr, K. M. (2012). The eight-item modified Medical Outcomes Study Social Support Survey: psychometric evaluation showed excellent performance. *Journal of Clinical Epidemiology*, *65*(10), 1107–1116.

Advancing Family Medicine, Transforming Primary Healthcare