

Experiencing financial toxicity associated with cancer in publicly funded healthcare systems: a systematic review of qualitative studies

Margaret I. Fitch PhD¹ & Christopher J. Longo PhD²

¹Bloomberg Faculty of Nursing University of Toronto ; ²Health Policy and Management, DeGroote School of Business, McMaster University, Burlington, Ontario, Canada

Introduction

- Qualitative investigations contribute to understanding how patients experience and cope with burdens associated with cancer. Such understanding contributes to identifying research priorities and developing relevant interventions.
- Cancer and its treatment have a myriad of physical, emotional and practical consequences for individuals and their families.
- One practical consequence associated with cancer is a financial burden experienced by patients and their families. The resulting distress and hardship can be labelled as financial toxicity and treated as a side effect of the diagnosis and treatment.
- Various studies about financial stress, strain and toxicity cite ranges of 41%-48% (stress), 7%-39% (strain) and 22-27% (toxicity) for cancer patients and their families. These numbers reflect the predominantly publicly funded health care systems and highlight that cancer patients experience these challenges fairly often.
- As cancer conceptualizations shift to acknowledge its chronic nature, greater understanding about the dimensions of the long-term impacts of financial toxicity are needed.

Methods

- A systematic review was undertaken to synthesize the qualitative evidence on cancer-related financial toxicity from the perspective of patients in publicly funded healthcare systems where financial protection would be strongest.
- Articles published between January 1, 2005, and March 7, 2019, describing financial burden experienced by cancer patients were identified using OVID, MEDLINE, Embase, PsychInfo, CINAHL, Business Source Complete, and EconLit databases.
- English language, peer-reviewed qualitative papers describing studies in countries with predominantly publicly funded healthcare systems were eligible.
- Quality appraisal was conducted using CASP Quality Appraisal Checklist.
- Narrative synthesis was completed with extracted data and themes identified inductively.

Results

- Search identified 17 qualitative papers, which, when reviewed for eligibility, was reduced to 12 following full paper review.
- All papers had a primary objective to describe the financial impact on individuals diagnosed with cancer and their families and coping with the financial stresses and strains.
- 12 papers reported on 10 studies conducted in Canada (2), Australia (2), England (3), and Ireland (3)..
- All used a qualitative descriptive design with one being a phenomenology and one using grounded theory.
- A wide range of labels were used to identify the financial variable of interest and various populations were targeted for study.
- Across the 10 studies, 243 unique cancer patient and 56 family members were interviewed.

Author of Paper	CASP Criteria									
	1	2	3	4	5	6	7	8	9	10
Hegney et al 2005	✓	X	X	?	?	X	✓	✓	✓	?
Shahid et al 2011	X	✓	✓	?	✓	?	✓	?	✓	✓
Moffat, Noble & Exley 2010	✓	✓	✓	✓	✓	?	?	?	✓	✓
Amir et al 2012	✓	✓	✓	✓	✓	?	✓	✓	?	X
Moffat, Noble & White 2012	✓	✓	?	✓	✓	X	✓	✓	✓	✓
O'Ceilleachair et al., 2012	✓	✓	✓	✓	✓	?	✓	✓	✓	✓
Timmons et al., 2013	✓	✓	✓	✓	✓	?	✓	✓	✓	✓
Timmons et al., 2013a	✓	✓	✓	✓	✓	?	✓	✓	✓	✓
Byrne et al., 2018	✓	✓	✓	✓	?	X	X	?	✓	?
Laizier et al. 2005	?	?	?	✓	?	X	✓	✓	✓	✓
Longo et al, 2016	✓	✓	✓	✓	✓	X	✓	✓	✓	✓
Fitch et al., 2018	✓	✓	✓	✓	✓	X	✓	✓	✓	✓

Figure 1: Results of quality assessment – none met all criteria; 5 missing only one criteria

Themes

- Household and medical costs are increased with cancer
- Financial resources are reduced
- Financial changes and financial hardship vary
- Financial hardship has many consequences
- Various mitigating strategies are used

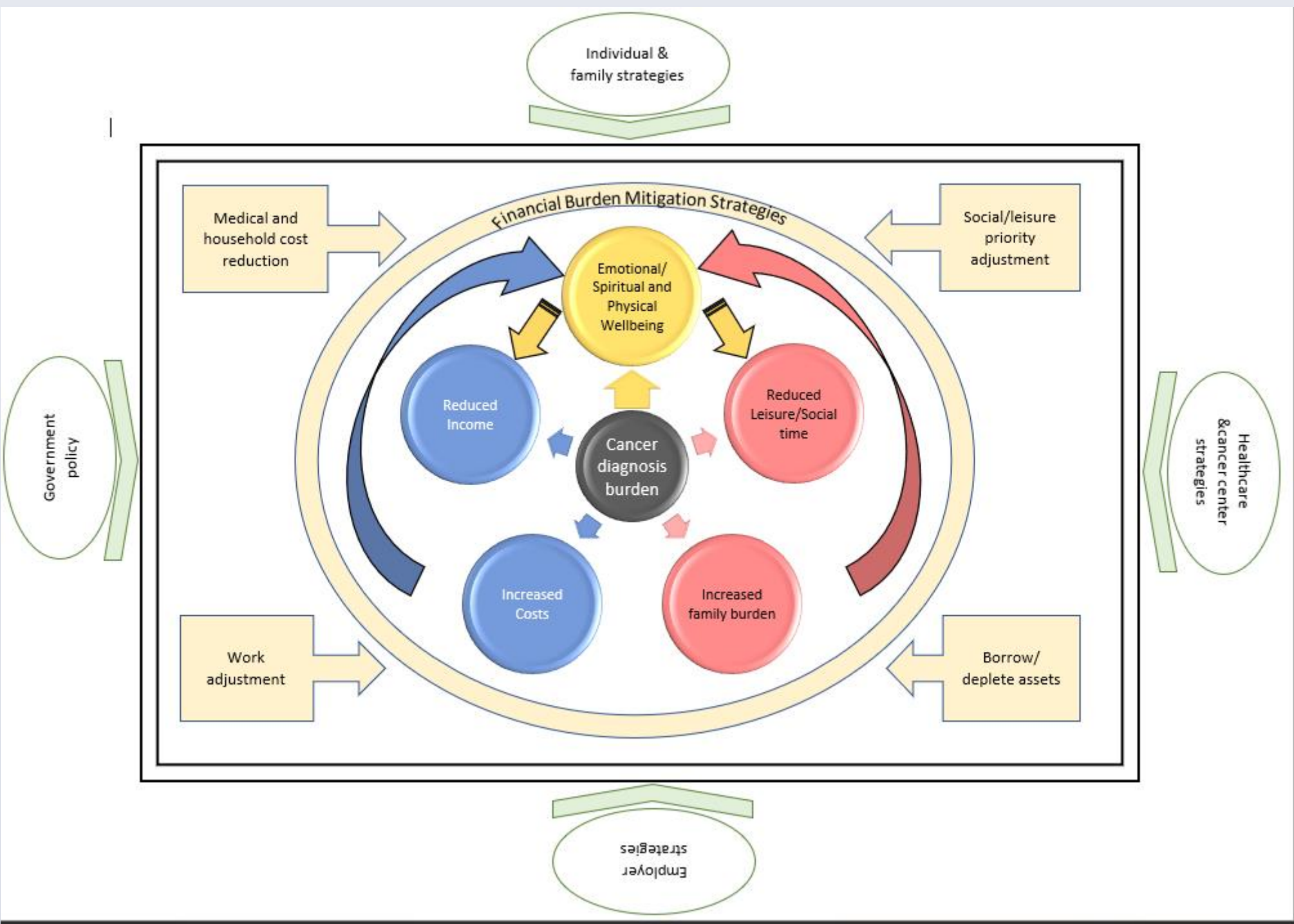


Figure 2: Conceptual model reflecting dimensions of financial toxicity for individuals diagnosed with cancer and their families.

Discussion

- Even in predominantly publicly funded health care systems there were consistent issues regarding travel for care, food, accommodation and family support for which institutions and employers need to consider.
- Financial toxicity is a reality for some cancer patients and the effects ripple out to the family. Effects can be profound and long-term.
- The responsibility for implementing mitigating strategies at present would seem to fall primarily on the individual and his or her family. Little relief appears to come from external or governmental agencies. This observation raises questions about the relationship between the health and welfare safety nets within countries and where the responsibility is for acting to offset the financial issues created by health-related difficulties such as cancer.
- There are implications for health care professionals for conducting risk assessments for financial toxicity and providing relevant information early in the course of the cancer and treatment experience. There is also a need to monitor the financial impact and distress during the experience.
- Future research is required to increase our understanding of the impact and find appropriate interventions for providing financial protection for individuals who are at risk and for ameliorating the hardship for those in difficulty. The solutions may differ in different settings given the nature of the health care systems and local level of resource.

References

(1) Fitch MI, Sharp L, Hanly P, Longo CJ. Experiencing financial toxicity associated with cancer in publicly funded healthcare systems: A systematic review of qualitative studies. *Journal of Cancer survivorship* 2022, 16, 314-328. (2) Longo CJ, Fitch MI, Banfield L, Hanly P, Yabroff KR, Sharp L. Financial toxicity associated with a cancer diagnosis in publicly funded healthcare countries: a systematic review. *Support Care Cancer*. 2020;28(10):4645–4665. <https://doi.org/10.1007/s00520-020-05620-9>