Grant Report

Title: Redefining frailty with resilience and self-efficacy in older adults and caregivers in acute care context

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Summary:

Hospitalised elderly are at higher risk of functional decline due to their illness severity and pre-existing frailty. It may be possible to halt, reverse, manage or even stop worsening of adverse outcomes of frailty. There is a lack of knowledge on the meaning of frailty in hospitalised older patients and their caregivers in acute care settings, especially the psychosocial components i.e. self-efficacy and resilience, which may be the key influencers on frailty outcomes. Resilience is now more commonly accepted as a dynamic and adaptive process that is developed as a learned behavior to help an individual to overcome adversity. With older adults, resilience is referred to as the ability to maintain a degree of physical or mental health after sickness or loss. Previous findings reported positive correlation between resilience and self-efficacy, as resilience can be reinforced through promotion of self-efficacy. Self-efficacy is a cognitive appraisal of an individual's own capabilities to perform a specific task or function with an expectation of achieving the desired outcome.

Delaying the onset of frailty is crucial in successful ageing, leading to a better quality of life. Frailty can be potentially countered through building of resilience and self-efficacy. The Psychosocial pathways of frailty developed in this study highlighted the overlapping relationships among frailty, resilience and self-efficacy. The older adults and their caregivers identified various approaches that helped to maintain the physical and psychological well-being as well as social interactions under stressful situations. This aid in improving their resilience and self-efficacy. Affectional, cognitive and motivation processes are important in frailty outcomes because self-efficacy beliefs affect one's emotions, thoughts and motivation. Individuals with positive perception of their own self-efficacy fosters effective coping mechanisms that aids in the coping with adversity and decreases their limitations in carrying out activities.

Aim of Research

- (1) To explore the perceptions and beliefs of frailty in hospitalized older adults and their caregivers; and
- (2) understand the roles of resilience and self-efficacy in frail older adults hospitalized in the acute care context; and
- (3) establish a new model utilising resilience and self-efficacy in the concept of frailty.

Method of Research and progression

A grounded theory study was conducted with older adult patients aged 65 years and older, admitted to the acute tertiary hospital, as well as family caregivers. Data saturation was achieved at 25 patients and 10 caregivers. Individual interviews were conducted in both English and Mandarin between July 2020 to July 2021. These sessions were audio recorded and ranged between 30 to 80 minutes. Examples of the interview questions included: What do you understand by the term, frailty? Would you consider yourself as frail? What do you understand by the term, resilience? Can you name some factors that you may have to help you cope with your current situation? What is your goal in your health/current health situation? What are the factors that may aid/pose as barriers in attaining your goal in your health/current health situation? Data were analyzed using Glaserian constant comparison method (Glaser, 1992). All audio-taped interviews were transcribed verbatim. Transcribed data were coded and grouped into categories. Through the saturation of categories, a detailed description of the emerging framework was developed. Various strategies were undertaken to ensure the credibility of the study findings, including maintaining a clear audit trail and member checking.

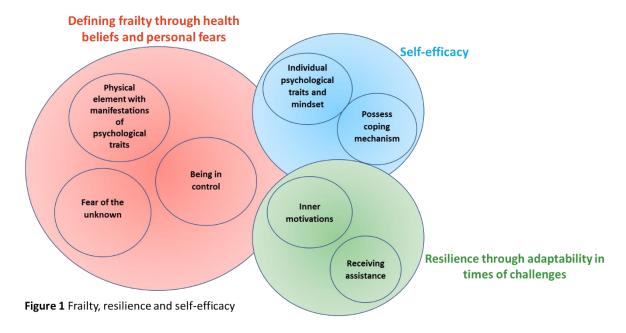
Data collection of this study is completed. The data analysis is undergoing revision and manuscript writing is in progress and will be submitted to the Journal of Advanced Nursing.

Results of research

The analysis of the data revealed the relationships between frailty, resilience and self-efficacy. The three categories that emerged from the data: (i) Defining frailty-health beliefs and personal fears; Resilience through adaptability in times of challenges; and (iii) Self-efficacy (Table 1). While both patients and caregivers had differing perceptions on frailty and resilience, they also identified overlapping elements. In addition, self-efficacy has been identified as a construct which can influence both frailty and resilience (Figure 1). This led to the theory 'Psychosocial pathways of frailty'.

Table 1 Relationship between frailty, resilience and self-efficacy

Categories	Defining frailty through health beliefs and personal fears	Resilience through adaptability in times of challenges	Self-efficacy
Defining characteristics	Theme 1: Physical element with manifestations of psychological traits • Association with physicality and age • Mental state	Theme 1: Individual psychological traits and mindset • Positivity and contentment • Acceptance and facing	Theme 1: Inner motivations Search for purpose Autonomy
	Theme 2: Fear of the unknown Negligence in health and sudden onset of illness Losing independence and being burdensome	reality • Level of perseverance	
Type of responses	Theme 3: Being in control Involvement in lifestyle, exercise and diet Self-awareness	Theme 2: Possess coping mechanism Staying active and independence Religious beliefs	Theme 2: Receiving assistance Communicating to ventilate or to receive help Demonstrating empathy, care and support Family presence and social life



Future areas to take note of and going forward

Exploration of older adults' and their caregiver's perceptions and beliefs of frailty is vital for healthcare professionals to understand their needs and develop appropriate interventions to improve outcomes of frailty in hospitalized elderly in Singapore. The combination of a negative focus (frailty) and a positive concern (self-efficacy and resilience) offers opportunities in the development of an innovative model to integrate resilience and self-efficacy in the concept of frailty to design and implement innovative interventions to manage and improve outcomes of frailty in our local ageing population.

The participants in this study verbalised their experience of fear related to the loss of function and independence from the onset of illness. This emphasised the importance of understanding the diverse conceptualization of frailty, across cognitive and social dimensions, which differed from the physical definitions of frailty. The participants believed of the potential of retaining the health capacity and functions of the older patients whilst being frail. Assistance can be provided to help them maintain their independence, which can aid to improve their overall quality of life. Meanwhile, various coping strategies can enhance self-efficacy and build greater resilience in individual, including maintaining active involvement in the health management and social life.

Literature addressing resilience and self-efficacy in the frail older population are limited, this is an area which requires further exploration. Deconstructing resilience and self-efficacy can inform future research comparing their impact in the context of frailty. This study has also developed a conceptual framework for future development of targeted interventions that integrate resilience and self-efficacy building to improve frailty.

Means of official announcement of research results

- SingHealth Duke-NUS Quality and Innovation Day (QID) 2022 Poster Submission (11th March 2022)
- 2. Singapore Healthcare Management 2022 Poster Submission (August 2022)
- 3. Writing of manuscript in progress for publication submission to Journal of Advanced Nursing (to submit in May)