



香港中文大學  
The Chinese University of Hong Kong



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# Measuring self-efficacy for caregiving of caregivers of patients with palliative care need: Validation of the Caregiver Inventory

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# Research Team



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# Palliative Care

- WHO (under Cancer category): An approach that improves QoL of patients and their family facing the problem associated with life-threatening illness, ...'  
(<http://www.who.int/cancer/palliative/definition/en/>)
- WHO (2011): A more appropriate concept
  - Offered from the time of diagnosis, alongside potentially curative treatment, to disease progression and the end of life. (Hall et al., 2011)



# The Challenge

- A worldwide public health issue (WHO, 2002)
  - Ageing populations
  - Change of pattern of diseases: chronic diseases
  - Complex needs of older people
- Hong Kong
  - > 1.2 million adults age  $\geq 65$  by 2018 (Planning Dept, 2009)
  - Top 5 causes of death in 2013
    - Cancer, Pneumonia, Heart, Cerebrovascular, Chronic lower respiratory
    - Similar distressing symptoms regardless diagnosis (Lo & Woo, 2000)

Similar Palliative care needs



# Informal Caregivers

- Legal: ‘Informal caregiver is a family member or a natural person who aids and supervises the daily cares of a disabled person’.
- Caregiving of patients is a **very stressful event**
- **Expected to be more serious** for patients with palliative care needs
  - Chronic nature of the diseases
  - Don’t know when can stop

(Zarit, 2002; Carretero et al., 2009)



# Caregiving: Two sides of a coin

## – Negative aspects

- **Caregiver burden**: decrease in both physical and psychological health associated with caregiving
- In turn, can lead to undesirable consequences to the **patient**

## – Positive aspects

- Fulfilment, become a stronger person, better communication skills (among **‘positive caregiver’**)
- In turn, may lead to a better QoL of the **patient** by providing better care and support

(Carretero et al., 2009; Semiatin et al., 2012)



# Self-efficacy for Caregiving

- Social Cognitive Theory: **Self-efficacy**
  - Perceived confidence in one's ability to perform a behavior in a given situation
  - **amenable to change** (Bandura, 2001)
  - Postulate: SE for caregiving
    - more successful in caregiving
      - then lesser burden and more positive aspects



# SE for Caregiving

- Supporting evidence
  - Associated with increased positive aspects of caregiving and lesser burden
  - Mediating factor (dementia):
    - Social support and QoL
    - Social support and depression

(Cheng et al., 2012; Uei et al., 2013; Au et al., 2009; Zhang et al., 2014)

- Interventions for caregivers of dementia

(Savundranaygam & Brintnall-Peterson, 2010)





# Tools measuring SE for Caregiving

- Previous studies: Either disease-specific or non-specific for caregiving
- Two HK studies on dementia patients:  
(Revised Scale for Caregiving Self-Efficacy)
  - Disease-specific: **patients with palliative care needs?**
  - Negative aspects of caregiving. **Positive?**

(Cheng et al., 2012; Au et al., 2009)



# The Caregiver Inventory (CGI)

- A valid instrument with a better coverage of caregiving, in particular targeting caregivers of patients with palliative care need is **lacking in Hong Kong**
  - CGI for patients with palliative care needs:
    - 21 items on 4 domains:
      - Managing medical information (3 items)
      - **Caring for the care recipient (7 items)**
      - **Caring for oneself (caregiver) (5 items)**
      - Managing difficult interaction and emotions (6 items)
- (Merluzzi et al., 2011)



# Current Study

## Aims:

- Translate and adapt CGI into Chinese (C-CGI)
- Examine psychometric properties of C-CGI
  - Reliability
  - Construct Validity



# Subjects

- Dyads of patient-caregiver
  - Patient:
    - Inclusion:
      - age 18 or above
      - Classified as in need for palliative care with NECPAL CCOMS-ICO<sup>©</sup> Tool (Version 1.0)
      - Communicable
      - Primarily living at home
    - Exclusion:
      - Severe cognitively impaired (MMSE  $\leq 10$ )
  - Caregiver
    - Age 18 or above
    - Primary caregiver as suggested by the patient
    - Taking care of the patient over the past three months
    - Communicable



# Design and Setting

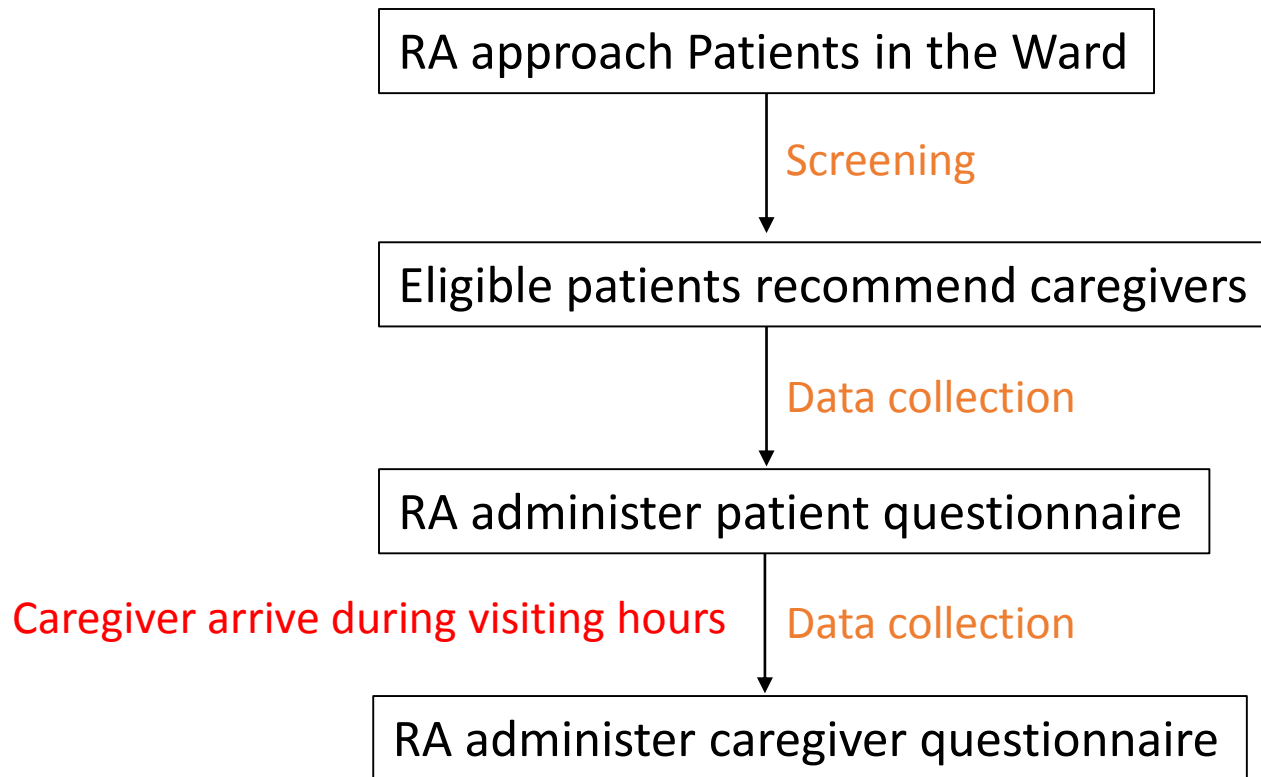
Study Design: A cross-sectional survey

Study sites:

- Shatin Hospital: Palliative care ward
- Grantham Hospital: Geriatric medical ward
- Alice Ho Miu Ling Hospital: Emergency ward



# Procedure



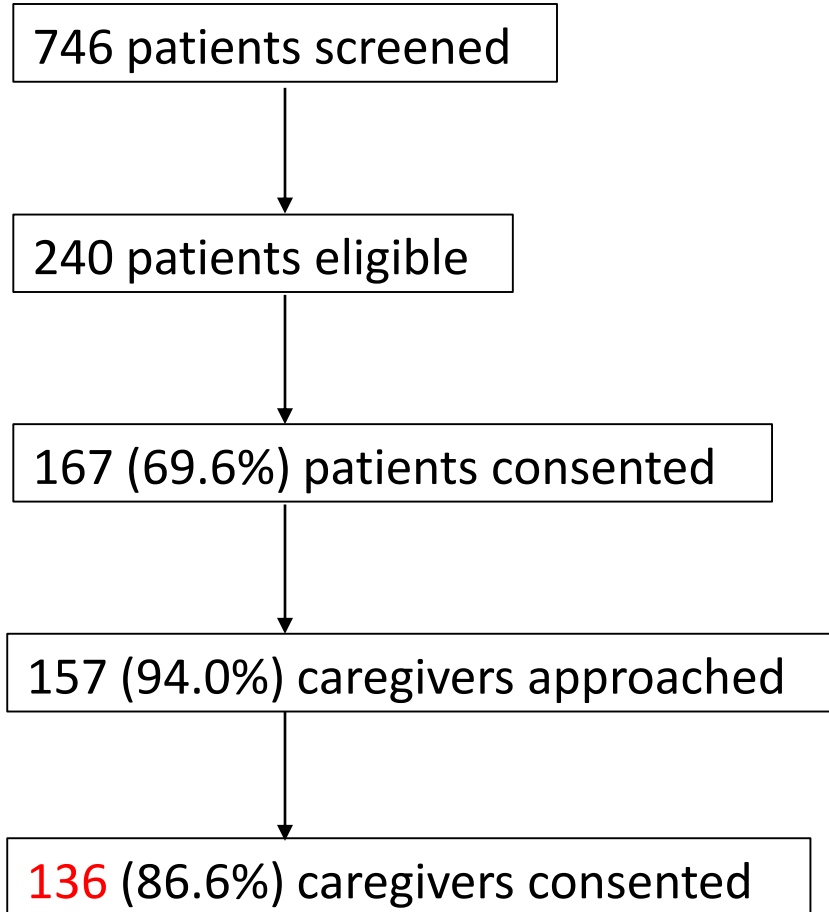
# Main Measures

Construct	Instrument	Score
Caregiver		
Self-efficacy for caregiving	Caregiver Inventory (21 items): 4 dimensions	Higher score, higher self-efficacy
Global Burden in caregiving	Caregivers Strain Index (C-CSI)	Higher score, higher burden
Perceived social support	Multi-dimensional scale of perceived social support (C-MSPSS)	Higher score, higher support
Patient		
Physical functioning	Modified Barthel Index	Higher score, more independency
Quality of life	McGill Quality of Life Questionnaire	Higher score, higher QoL



# Result

Subject recruitment: 1 Sept 2016 – 3 Jan 2017





# Sample Characteristics of Patients

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	<b>Mean±SD / Freq (%)</b>
Age	76.8±10.5
Male	56 (41.2%)
Married	53 (38.7%)
Educational level	
No formal education	53 (39.0%)
Primary education	49 (36.0%)
Secondary education or above	34 (25.0%)
Perceived poor financial status	29 (16.2%)

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# Sample Characteristics of Caregivers

	Mean±SD / Freq (%)
Age	57.3±14.5
Male	48 (35.0%)
Married	116 (84.7%)
Educational level	
No formal education	13 (20.6%)
Primary education	33 (24.3%)
Secondary education or above	90 (66.2%)
Relationship with the patient	
Children	77 (56.2%)
Spouse	50 (36.8%)
Others	9 (6.6%)
Perceived poor financial status	44 (38.2%)
Perceived poor health status	23 (16.9%)
Have maid to help	98 (71.5%)
Patient received long-term care service	20 (14.7%)

# Responsiveness

- One subject missed Items 19 and 20
- Item 21 (maintain a close relationship) : 35.3% reported '10'

# Reliability (n = 135)

Subscales in CGI (range: 1-9)	Mean±SD	$\alpha$
Managing Medical Information	6.4±1.4	0.748
Caring for the Care Recipient	6.7±1.3	0.871
Caring for Oneself	6.2±1.4	0.805
Managing Difficult interactions and emotions	6.3±1.3	0.824



# Construct Validity: Caregiver data

Subscales in CGI	Correlation	
	Social Support (+ve)	Caregiving burden (-ve)
Managing Medical Information	0.362**	-0.081
Caring for the Care Recipient	0.251**	-0.273**
Caring for Oneself	0.390**	-0.341**
Managing Difficult interactions and emotions	0.277**	-0.286**

\*\*  $p < 0.01$



# Construct Validity: Patient data

Subscales in CGI	Correlation	
	MBI (+ve)	QoL (+ve)
Managing Medical Information	0.159	0.091
Caring for the Care Recipient	0.175*	0.217*
Caring for Oneself	0.249**	0.188*
Managing Difficult interactions and emotions	0.287**	0.182*

\*  $p < 0.05$ , \*\*  $p < 0.01$



# Discussion

**Caring for Oneself** related the strongest with

- Caregiving burden
- Perceived social support
- Patient's physical functioning

**Caring for the Care Recipient** related the strongest with

- Patient's QoL



# Discussion

Data is in progress: 230 dyads

- Preliminary support to the psychometric properties of C-CGI

## Further Analysis

- Factorial validity: Exploratory and Confirmatory Factor Analysis
- Test-Retest Reliability
- Effects of having a maid to help in caregiving



