What is frailty? Perspectives from Chinese clinicians and older immigrants in New Zealand

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eCALD® Cross-Cultural Interest Group Session

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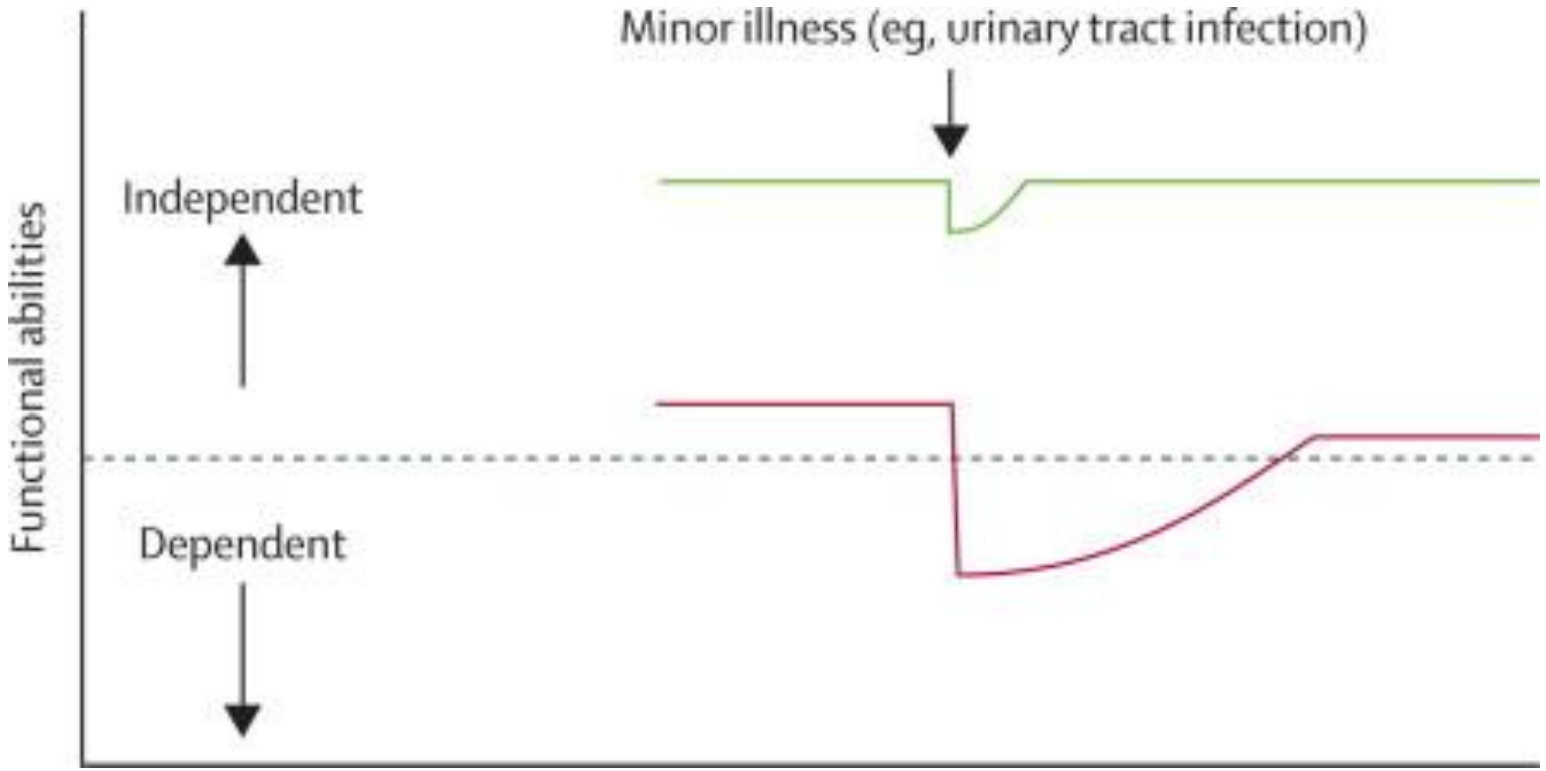
Frailty: Definitions

- An elevated state of risk or vulnerability characterised with loss of reserves including energy, physical ability, cognition and health (Fried et al. 2001)
- Older people with frailty are more vulnerable to a sudden decline in health and other negative outcomes in response to seemingly small trigger events or changes.



(Clegg et al. 2013)

- Frailty increases with age as a consequence of age-related physiological declines,
- A quarter to a half of 85+ people have frailty

(Clegg et al. 2013)

Frailty: Adverse outcomes

- Mortality
- Hospitalization
- Residential care placement
- Falls
- Dependency
- Poor quality of life

Frailty Index (FI)

- Based on accumulation of 'deficits' (from 30 items)
  - Activities of Daily Living
  - Cognitive function
  - Chronic diseases
  - CVD
  - Depression/mental health
  - Poor eyesight/hearing
  - Falls, fractures and joint replacements
- 0-1 scale for each component
- Calculate the proportion of deficits held (so 0-1 scale)
- Can be divided into three categories
  - Robust (0-0.12)
  - Pre-frail (0.13-0.21)
  - Frail (>0.21)

Box 1: The CSHA Clinical Frailty Scale

1 *Very fit* — robust, active, energetic, well motivated and fit; these people commonly exercise regularly and are in the most fit group for their age

2 *Well* — without active disease, but less fit than people in category 1

3 *Well, with treated comorbid disease* — disease symptoms are well controlled compared with those in category 4

4 *Apparently vulnerable* — although not frankly dependent, these people commonly complain of being "slowed up" or have disease symptoms

5 *Mildly frail* — with limited dependence on others for instrumental activities of daily living

6 *Moderately frail* — help is needed with both instrumental and non-instrumental activities of daily living

7 *Severely frail* — completely dependent on others for the activities of daily living, or terminally ill

Note: CSHA = Canadian Study of Health and Aging.

- Important to recognise that frailty
  - varies in severity
  - not static
  - can be made better or worse (Turner 2014)
- Identifying frailty offers an opportunity to prevent or delay adverse outcomes by introducing appropriate care pathways, interventions, and individualised treatment plans (Bergman et al. 2007, Senior et al. 2014)

- Previous international research studies of frailty in older Chinese people have predominately used quantitative methodologies (Chan et al. 2009; Chang et al. 2011; Hao et al 2016; Lau et al. 2016; Ng et al. 2014; Woo et al. 2005; Woo et al. 2015; Wu et al. 2018)

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Study Aim

- To explore the understanding, meaning and experience of frailty with Chinese health care professionals and older Chinese New Zealanders

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Methods

- Qualitative research
- Focus group methodology
  - uses the group and its interaction as a way to gain information about frailty through the shared understanding amongst group members

Methods: Settings and participants

- 3 focus groups:
  1) Chinese health care professionals
     - clinicians working with older adults in the Auckland region (purposively recruited)
  2) Cantonese speaking older Chinese
     - Chinese Positive Ageing Charitable Trust day programme
  3) Mandarin speaking older Chinese
     - Chinese Positive Ageing Charitable Trust day programme

- Each focus group facilitated by 2-3 bilingual researcher/research assistants with at least a masters degree qualification.
- Topic guide to elicit ideas and discussion about frailty in later life
  - Focus group participants were asked to give examples of frailty, and further questions were used to explore why they thought an older person was frail.

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- Focus groups were audio-recorded, verbatim transcribed and thematically analysed

NVIVO

Results

- 18 participants
  1) Health care professionals (n=7; female 71.4%)
     - nursing (n=4), social work (n=2) and mental health support worker (n=1)
  2) Cantonese Speaking older people (n=6, female 100%)
  3) Mandarin Speaking older people (n=4, female 75%)
  4) 1 English speaking older Chinese man

	Older Chinese N=11
Age (median, range)	81 (68-85)
Gender: Female	9 (81.8%)
Marital status	
Married	5 (45.5%)
Divorced	1 (9.1%)
Widowed	5 (45.5%)
Place of birth	
China	8 (72.7%)
Hong Kong	1 (9.1%)
Macau	1 (9.1%)
The Philippines	1 (9.1%)
No. of years in NZ (median, range)	18.5 (5-40)
Years of education (median, range)	7.5 (0-15)
Highest education	
Primary school	4 (36.4%)
High school	3 (27.3%)
Tertiary education	2 (18.2%)

- 3 main themes emerged
  - Theme 1: Ill-health, medical comorbidities and polypharmacy
  - Theme 2: Physical weakness, decline in physical and cognitive functioning
  - Theme 3: Association with psychological and social health
- Participants also discussed the cultural expectation of ageing and frailty, and strategies to improve frailty in the community.

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Theme 1: Ill-health, medical comorbidities and polypharmacy

- Ill-health, multiple/chronic/unstable medical problems and medical comorbidities related to frailty.
- “病痛”

  “sickness” and “pain”

- All of the Cantonese speaking older people mentioned metabolic syndrome “三高” (“three-highs”) as a condition that is associated with frailty.
- Some HCPs reported a relationship between polypharmacy and frailty.
- Many Cantonese speaking older people believed polypharmacy could lead to reduced immunity, ill-health and frailty.

- Most HCPs thought older Chinese prefer to take traditional Chinese medicine over western medicine:

"The Chinese (medicine) was more natural, I think, that's what I think the older generation think of, you know. They are taking Chinese medication. There is no side effect or less side effect."

- However, older Chinese people described a trusting relationship with their NZ GPs who prescribed them with western medication.
- They were also aware of the potential interaction between TCM and western medication

Theme 2: Physical weakness, decline in physical and cognitive functioning

- the association between frailty with physical weakness and reduced energy

“体力不支”	*“physically weak”*
“体力不行”	*“no strength”*
“体力不够”	*“not physically enough”*
“力不从心”	*“powerless”*

“我觉得老了. 原来80岁以前，什么东西都能干，什么事情都敢，什么都不怕，能行. 现在80岁后，什么事情都做不了了，走路也走不了了.”

“I feel old. Prior to 80 years old, I could do everything, I had confident and was not afraid of anything, could walk. Now I am older than 80 years old, I cannot do much and even have problem with walking.”

- described cognitive decline (such as forgetfulness, short term memory impairment, problems with thinking abilities, cognitive impairment and dementia) that could be associated with frailty.

Theme 3: Association with psychological and social health

- Many believed depression could lead to poor physical health.

"我覺得情緒對身體影響最大."

"I think mood has the greatest effect on health."

- The complex and inter-relationship between physical health, psychological health and social health was highlighted by the HCPs and older Chinese.
  - E.g. a HCP thought an older person who is emotionally struggling with ill-health and frailty could suffer from loneliness and social isolation.

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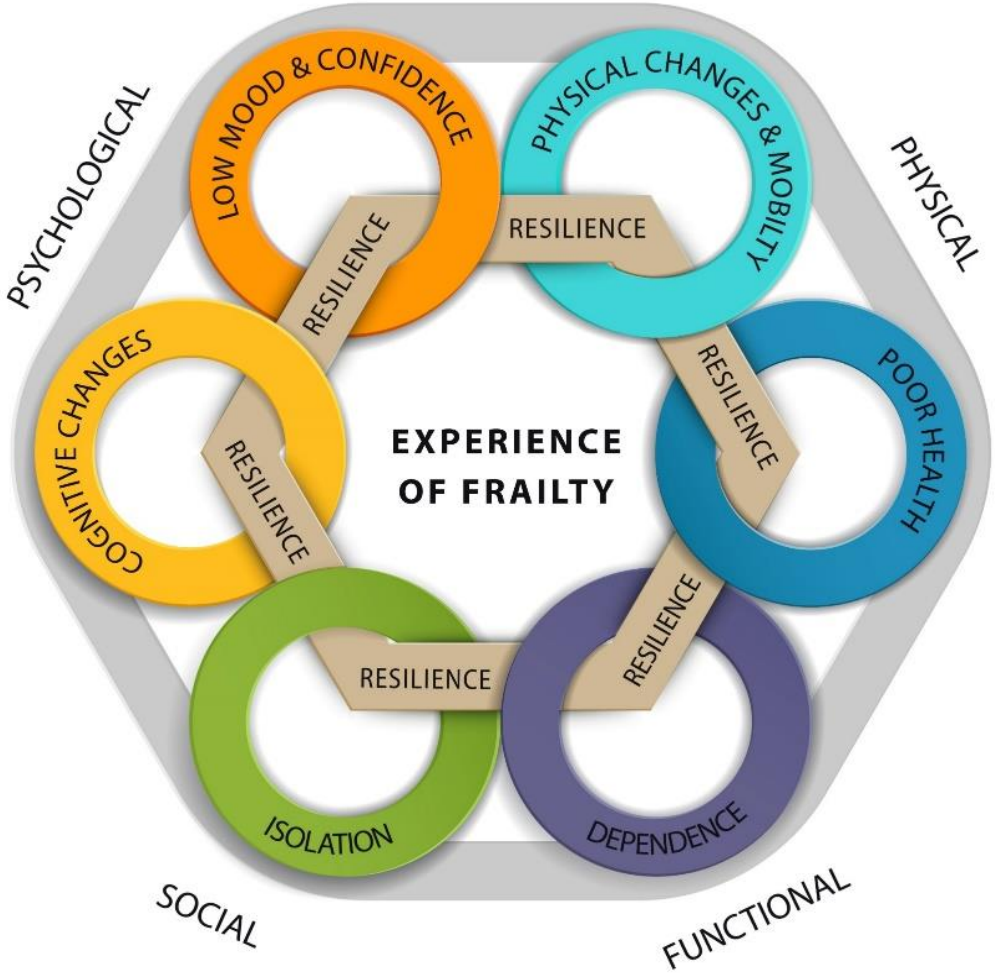
Discussion

- Frailty is a multi-dimensional concept covering physical, psychological, social and environmental factors (Markle-Reid and Browne 2003)
- The 3 main themes emerged from our qualitative data are consistent with this multi-dimensional concept of frailty
- Our results have therefore provided face validity for this approach to offer a meaningful way of talking about frailty for older Chinese New Zealanders

Pakeha Focus Groups in Christchurch



Gee, S et al. 2019 Journal of Aging Research

Theme 1: ill-health, medical comorbidities and polypharmacy

- supported by previous frailty literature. For example:
  - frail Chinese older people had higher prevalence of chronic conditions than the robust (Wu et al. 2018)
  - polypharmacy is one of the determinants of frailty (Coelho et al. 2015)
  - level of frailty increased with each cardiometabolic disorder (Tang et al. 2013)

Theme 2: physical weakness, decline in physical and cognitive functioning

- very much consistent with the Chinese-Canadian study of health and aging clinical frailty scale physician version (CSHA-CFS PV)'s descriptions and definitions of fitness and frailty.
  - 1 (very fit) to 7 (severely frail)

(Rockwood et al. 2005)

- "very fit"
  - robust, active, energetic, well motivated and fit; these people commonly exercise regularly and are in the most fit group for their age
- "severely frail"
  - completely dependent on others for ADL, or terminally ill

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Theme 3: Association with psychological and social health

- Depression was found to be associated with frailty in Chinese older people (Chang et al. 2011) and an important contributor of frailty in the Singapore Longitudinal Ageing studies (Ng et al. 2014)

- the association of social factors (e.g. unfavourable socioeconomic status, living alone, unmarried) and frailty was confirmed in previous Chinese studies (Wu et al. 2015)
- older Canadian Chinese: frailty was associated with lack of social support network (Woo et al. 2005)

Limitations

- the collective term of Chinese in New Zealand subsumes diverse national, linguistic, and settlement backgrounds.
- small sample size

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Conclusion

- The concepts of frailty considered by Chinese HCPs and older Chinese New Zealanders in this study are largely consistent with that described in the Chinese and non-Chinese frailty literature
- Public health, primary care planning and interdisciplinary approach are necessary to target the multi-dimensional nature of frailty in the community (Chang et al. 2011. Woo et al. 2015)

- Our findings could be used to inform the development of Chinese specific health promotion materials on frailty to improve its recognition by older Chinese people and their families who would then seek medical advice prompting early identification, diagnosis and management of frailty by HCPs.

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