

Social Connections Mediate the Association Between Frailty and Meaning in Life in Older People

Anson K. C. Chau^a, Yang Fang^a, Anna Wong^a, Ruby Yu^{a,b}, Jean Woo^{a,b}

^a CUHK Jockey Club Institute of Ageing, The Chinese University of Hong Kong, Hong Kong SAR, China

^b Department of Medicine and Therapeutics, The Chinese University of Hong Kong, Hong Kong SAR, China

Correspondence to Anson K. C. Chau; ansonchau@cuhk.edu.hk

Background

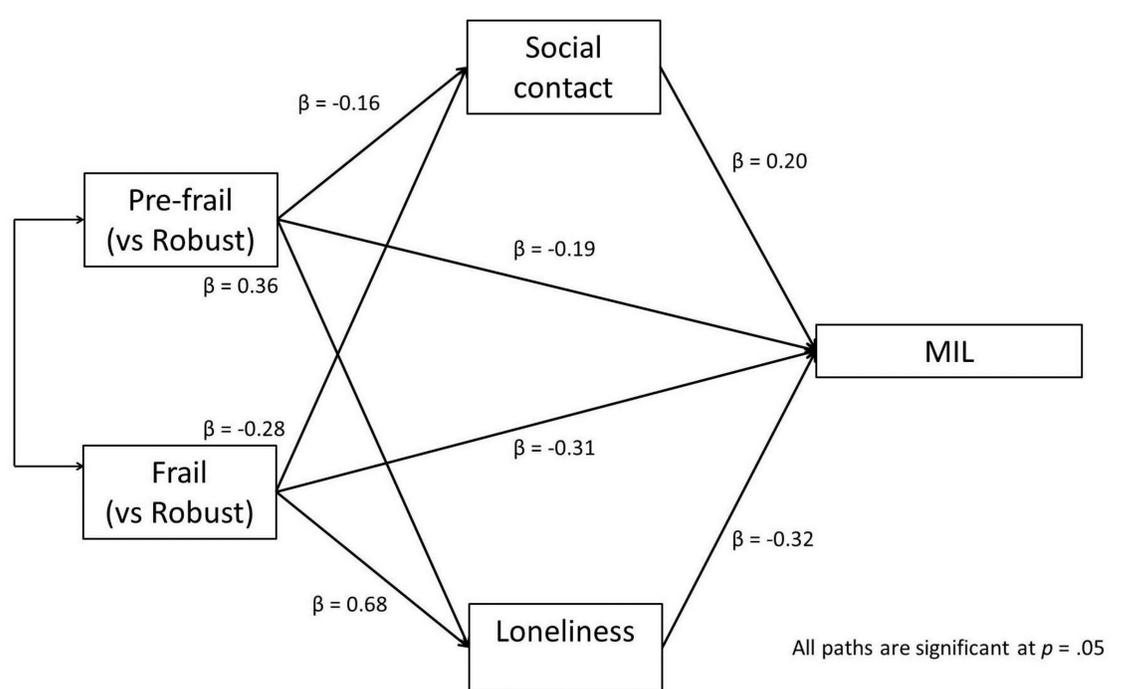
- ❖ Meaning in life (MIL) refers to a sense of direction, order and purpose in life, and a belief that there is a reason for existence (Reker, 1997). Seeking and attaining MIL is an important developmental task in old age (Erikson, 1959) that older people reconcile past events to develop a deep sense of coherence and transcendence of their life.
- ❖ Physical health has been shown to be associated with MIL in older people (e.g., Reker & Wong, 1998). However, the relationship between frailty, as a state of increasing physiological vulnerability for functional loss, and MIL has not been studied so far.
- ❖ Older people having more meaningful social connections reported higher MIL (Krause, 2012). Based on recent findings that frailty has adverse impacts on older people's social functioning (e.g., Hoogendijk et al., 2016; Herrera-Badilla et al., 2015), social connections may play a mediating role in the association between frailty and MIL.
- ❖ We aimed to:
 - ❖ investigate the association between frailty status and MIL. Explicitly, we hypothesized that frail older people has the lowest MIL, then pre-frail older people, and robust older people the highest.
 - ❖ test if social connections mediate the association between frailty and MIL.

Method

- ❖ A representative sample of Hong Kong Chinese people ≥ 60 were surveyed via a telephone interview (N = 773)
- ❖ Measures:
 - ❖ Frailty: FRAIL scale assessing presence of fatigue, resistance, ambulation, illnesses, and loss of weight. Participants were classified as robust (0 points), pre-frail (1-2) and frail (≥ 3)
 - ❖ MIL: one item "Do you feel your life is meaningful?" (0 "not meaningful" – 10 "very meaningful")
 - ❖ Two aspects of social connections were measured:
 - ❖ Social contact with family and friends: average of responses of four items "how often do you see/ visit your family/ friends?" (1 "never" – 4 "always")
 - ❖ Loneliness: the loneliness item from the Center for Epidemiological Studies-Depression Scale (1 "never" – 4 "always")
- ❖ A multiple mediation model with three-category independent variable (robust as reference) and two parallel mediators was tested with the SPSS macro PROCESS.

Result

- ❖ Frailty status was associated with lower MIL (pre-frail: $\beta = -0.33$, $p < .001$; frail: $\beta = -0.58$, $p < .001$) after controlling for gender, age, working status and educational level
- ❖ Frailty status was associated with less social contact with family and friends (pre-frail: $\beta = -0.16$, $p = .03$; frail: $\beta = -0.28$, $p = .01$) and higher loneliness (pre-frail: $\beta = 0.36$, $p < .001$; frail: $\beta = 0.68$, $p < .001$) after controlling for gender, age, working status and educational level
- ❖ The relative indirect effect of frailty on MIL was significant via both social contact and loneliness
 - ❖ via social contact (pre-frail: -0.03, 95% CI [-0.07, -0.01]; frail: -0.06, 95% CI [-0.12, -0.01])
 - ❖ via loneliness (pre-frail: -0.11, 95% CI [-0.18, -0.07]; frail: -0.22, 95% CI [-0.32, -0.14])



Conclusion

- ❖ Frailty is associated with lower MIL directly and indirectly via poorer social connections (i.e. less social contact and higher loneliness).
- ❖ The current findings suggested that frailty is inextricably related to psychosocial functioning of older people. A broader conceptualization of frailty including psychosocial vulnerability is warranted.