Defining and recognising frailty | Te tautohu me te kite i te hauwarea

What is frailty and why is it important?

As people age, they can lose their resilience and ability to adapt in the face of multiple disease processes and decreased physical strength and/or cognitive decline. Frailty is not based on the age of a person but on their physical and functional ability. It is a marker of vulnerability and signifies the need for extra care, especially during acute events (even mild ones).

Frailty can be defined as

'A medical syndrome with multiple causes and contributors that is characterised by diminished strength, endurance, and reduced physiologic function that increases an individual's vulnerability for developing increased dependency and/or death' (Morley et al 2013).

It is important to recognise decline so that appropriate interventions can be put in place. Physical frailty can potentially be prevented or treated with specific modalities, such as (Morley et al 2013):

- exercise
- protein–calorie supplementation
- vitamin D
- reduction of polypharmacy
- any other intervention that can increase resilience overall.

How?

Frailty should be suspected in older people who fall ('legs gave way', 'found on floor'), become immobile ('gone off-legs'), have new or increased incontinence, are susceptible to adverse medication effects and who present with delirium when unwell (Turner et al 2014).

Beware

In the frail, a sudden change in mobility can be a myocardial infarction, stroke or pneumonia, and a fall can be the presenting complaint of many serious illnesses (Turner et al 2014).

It is important to recognise and treat all possible causes of increasing frailty and gradual deterioration before assuming the person has reached the end of their life.

Clinical Frailty Scale*

1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 Well – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

3 Managing Well – People whose **medical problems are well controlled,** but are **not regularly active** beyond routine walking.

4 Vulnerable – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 Mildly Frail – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 Moderately Frail – People need help with **all outside activities** and with **keeping house.** Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

7 Severely Frail – **Completely dependent for personal care,** from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally Ill - Approaching the end of life. This category applies to people with **a life expectancy <6 months**, who are **not otherwise evidently frail.**

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

There are two main frailty theories (Clegg et al 2013)

Rockwood

Accumulation of deficits model, based on functional characteristics, as depicted in the clinical frailty above. See example of a frailty index.

Fried – phenotypic model, based on physical characteristics

- Weight loss
- Exhaustion
- Weakness
- Slow walking speed
- Reduced physical activity (Fried et al 2001)

Measuring frailty

There are several ways to measure the level of frailty; one is a 'frailty index' (FI), which measures frailty severity.

Rockwood frailty index:
Below is an example of how to determine a frailty index. Total items assessed divided by total number of deficits the person has (Searle et al 2008).

Deficits	Range	Frailty index classification
0–5 deficits	0/26 to 5/26 = 0.0 to 0.19	Non-frail
6–7 deficits	6/26 to 7/26 = 0.23 to 0.27	Pre-frail
> 8 deficits	8/26 or more = 0.31 or higher	Frail

Example – frailty index		
1. Congestive heart failure	10. Polypharmacy > 6	19. Renal disease
2. Cerebrovascular accident	11. Physical help with dressing	20. Pneumonia
3. Dementia, not specified type	12. Fatigue with self-report or staff observation, included in PHQ > 9	21. Urinary tract infection
4. Atrial fibrillation	13. No spouse	22. Wound infection
5. Depression defined as PHQ score > 5	14. Weight loss	23. Diabetes mellitus
6. Arthritis	15. Mobility impairment	24. Malnutrition
7. Hip fracture	16. Anything other than a regular diet	25. Psychotic disorder
8. Pressure sores	17. Bowel incontinence	26. Respiratory failure
9. Urinary incontinence	18. Cancer	
Scoring		
Non-frail 0.0–0.2	Pre-fail 0.21–0.29	Frail > 0.3

Bibliography | Te rārangi pukapuka

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