Jockey Club Cadenza hub 賽馬會流金匯

做自己健康的主人
Manage your own Health

13th HKEC Symposium on Community Engagement 2018
Paradigm Shift: From Hospital To Community
港島東醫院聯網醫社合作研討會(十三)醫社共創新思維
Seminar 4 : Healthy Aging @ Community
講座 4 : 逆轉「機」齡@社區

賽馬會 全城起動防衰老計劃

Jockey Club Frailty Prevention Campaign

Jockey Club CADENZA Hub
賽馬會流金匯
Service Manager 服務經理
Jenny Cheng (Nursing Officer護士長)

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What is "Frailty"? 什麼是衰老

- Frailty is a clinically recognized state of increased vulnerability. It results from ageing associated with a decline in the body's physical and psychological reserves
  衰老是一種隨著年紀增長而導致身體及心理儲備能力下降的一種臨床症狀。
- Frailty may be divided into physical frailty represented by sarcopenia, and cognitive frailty, represented by some degree of cognitive impairment (either the diagnosis of dementia or mild cognitive impairment)衰老的症狀可分為身體衰老(缺肌症)和認知衰老(腦退化症或輕度認知障礙)

Physical Frailty
功能衰退

Sarcopenia缺肌症

(**Sarcopenia** is the degenerative loss of skeletal muscle mass (0.5–1% loss per year after the age of 50)

Cognitive Frailty
認知衰退

Mild Cognitive Impairment輕度認知功能障礙

(Mild cognitive impairment (MCI) is an intermediate stage between the expected cognitive decline of normal aging)

Consequences of frailty衰老的後果

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Living with frailty
有衰老的老人

- Higher risk of dramatic changes in physical and mental health
- 身體及心理健康變化風險較高

Increased risk of adverse outcomes
增加不良後果的風險

- Falls
  跌倒
- Disability
  殘障
- Hospitalization
  住院治療
- Institutionalization
  入住護理院舍
- Mortality
  死亡

Increased burden
增加負擔

- Caregiving burden
  照顧者負擔
- Healthcare expenditures
  醫療開支

Challenges of population ageing: putting frailty as a cornerstone of health and social care systems

Woo .J. European Geriatric Medicine Society 2018 Published online: 27 April 2018

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https://doi.org/10.1007/s41999-018-0056-0

EDITORIAL

Challenges of population ageing: putting frailty as a cornerstone of health and social care systems

Jean Woo[1]

Received: 13 April 2018 / Accepted: 18 April 2018 / Published online: 27 April 2018

Historical perspectives

Geriatric medicine as a specialty has a fairly short history, its establishment resting on the efforts of prominent UK doctors initially. The core of geriatric medicine is the multi-domain approach that covers physical, functional, psychological, nutritional, and social domains versus the system approach, embodied by the comprehensive geriatric assessment. The dissemination of this specialty to other countries depended much on continuing advocacy by doctors who received training from established geriatric departments and then incorporating the specialty into the training curriculum and service delivery models of their own countries. Such efforts have varying degrees of success, and the specialty has seldom achieved the same status as other organ-based specialty such as cardiology or gastroenterology, being reflected by fewer (and declining) number of trainees. Neither has this approach been adopted widely in the primary care setting [1]. Worldwide there are various reasons for this such as: the observations that there are nothing special and everyone looks after elderly patients; attractions to specialties involving advanced technologies and procedures; negative images of ageing and lower health care prioritizations; and lower professional income or status. One major obstacle is that it is difficult to explain the need for this specialty in a concise way. The concept of frailty that has been developing in the past 20 years represents a unique opportunity to describe the essence of geriatric medicine in a concise, quantifiable, and measurable way that can be understood by clinicians, health managers, and policy makers.

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Frailty research and its impact

To date, the body of research has established that frailty represents a phenotype that is increasingly prevalent among older people (25% of 85+years); that predicts many adverse outcomes better than individual indicators; that is not disability or multi-morbidity, but closely related; that has a biological basis in multi-system dysregulation resulting in failure of homeostasis, having the characteristics of complex dynamic non-linear systems when stressed by external factors; and also representing a clinical syndrome where screening, diagnosis, prognosis, prevention, treatment, and uptake by health systems apply [2]. Frailty as an entity forms the topic of research from genomics [3], to 'frailomics' [4], to urban design [5].

Relevance to public health, health policy, and clinical management

From the public health perspective, frailty may be used as an indicator of service utilization [6], as well as an indicator of whether populations are ageing well. An indicator of frailty would be more relevant to ageing populations as an indicator of ageing well, and indirectly the magnitude of health and social care burden resulting from increasing numbers of very old people, and represent an advancement over the traditional indicators such as mortality (life span indicator only) and disability, consequent to chronic diseases (disability only). Relevant public health statistics should include trends in disability as well as frailty, to allow projections and formulation of health and social care policies in response to population ageing [7–9]. The inclusion of frailty is important as it captures a vulnerable state which may be prevented or ameliorated through lifestyle modification in mid-life, as well as risk-factor modification that includes the physical and social environment [5, 10].

Springer

The Asia-Pacific Clinical Practice Guidelines for the Management of Frailty

Journal of the American Medical Directors Association 2017;18:564-575

Strong recommendations were:

(1) use a validated measurement tool to identify frailty;
(2) prescribe physical activity with a resistance training component; and
(3) address poly pharmacy by reducing or de-prescribing any inappropriate/superfluous medications.

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Health talks
健康講座
April – July 2014
二零一四年四月到七月

- Over 20 talks
  超過20次講座
- Approximately 1500 participants
  約1500參加者

1st phase (Baseline)
第一階段(基線評估)
April – July 2014
二零一四年四月到七月

- Basic demographics
  基本人口統計資料
- Frailty status
  衰老狀態
- Sarcopenia
  缺肌症
- Memory impairment
  記憶衰退

2nd phase (Medical Follow-up)
第二階段 (醫療跟進)
July – October 2014
二零一四年七月到十月

- Comprehensive geriatric assessment
  全面性老年健康評估
- Medical consultation
  醫療諮詢
- Referrals
  轉介

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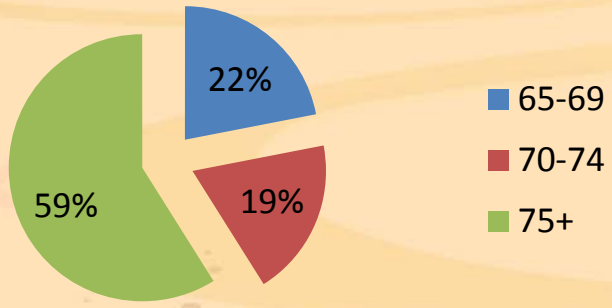
Participants characteristics
參加者的特徵

Age group

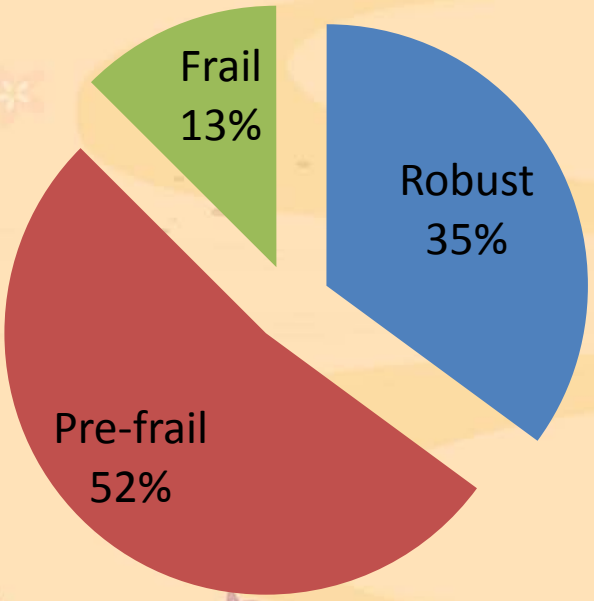


- Aged 65+ (N = 816)
- M 男性: 119 (14.6%)
- F 女性: 697 (85.4%)

1st phase (Baseline)
第一階段 (基線評估)

Prevalence of frailty among those aged 65+
65歲以上的社區人口衰老發生率

Frailty status 衰老狀況



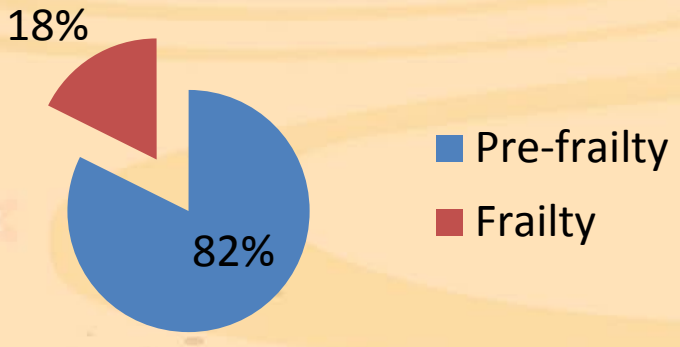
- About 1 in 8 (12.5 %) of community-dwelling population aged 65+ were frail
  每八名年齡為65歲以上的社區人口中，便有一人屬於衰老
- Pre-frailty was also found to be common
  前期衰老亦相當普遍
- More than half (52.4%) of the community-dwelling population aged 65+ were pre-frail
  超過一半的65歲以上的社區人口（52.4%）屬於前期衰老

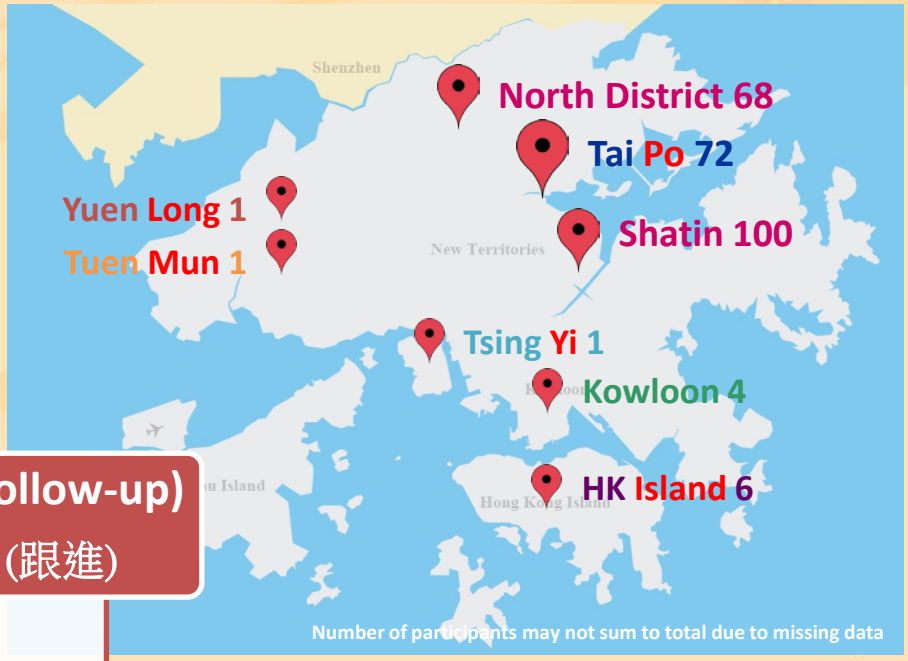
Morley et al. J Nutr Health Aging 2012;16(7):601-8

Participants characteristics

參加者的特徵

Frailty status衰老狀況





- **Inclusion criteria for the 2nd phase**
  第二階段納入條件:
  Aged 65+, pre-frail / frail 六十五歲以上 衰老前期 / 衰老

1st phase
第一階段

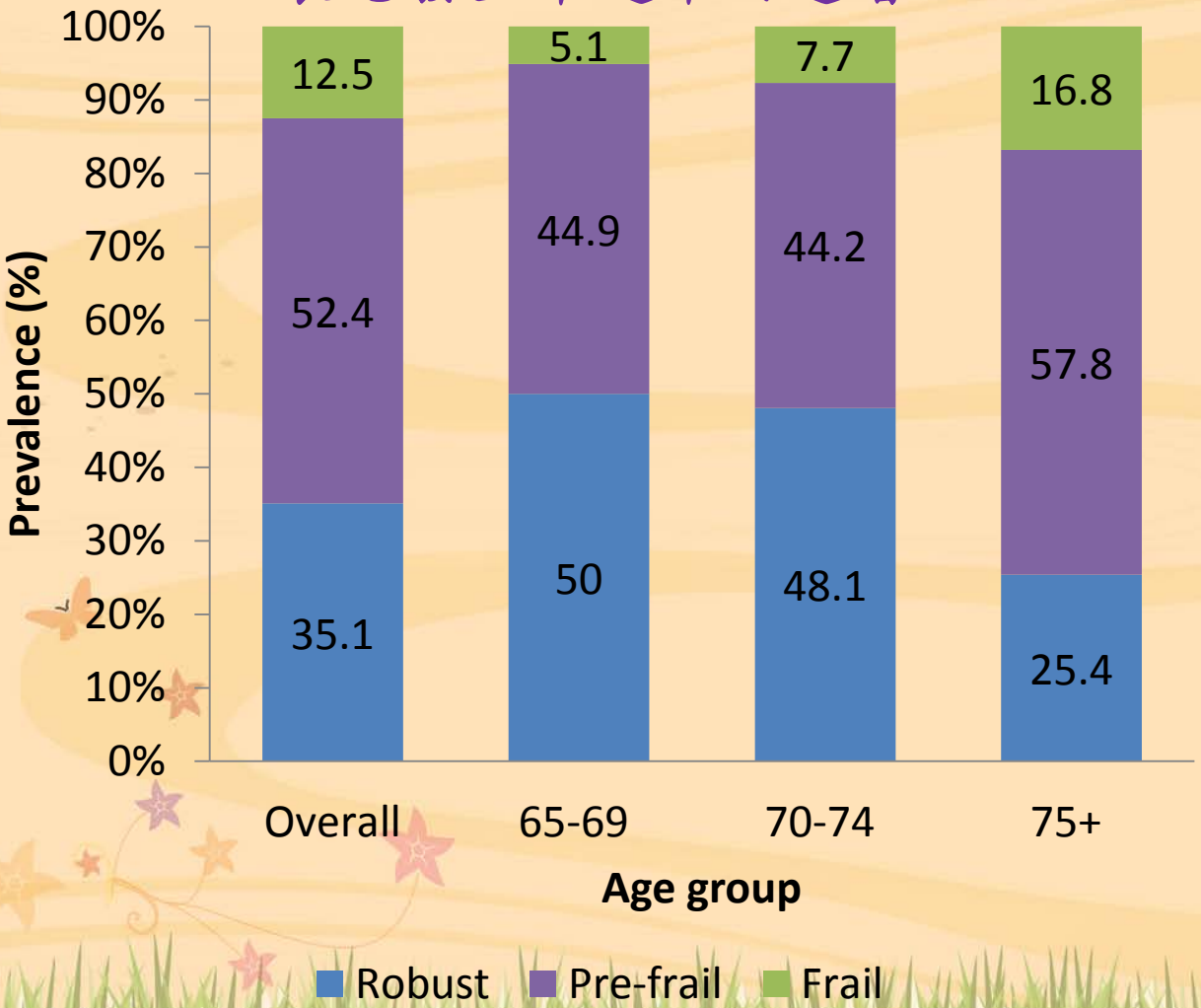
2nd phase (Follow-up)
第二階段 (跟進)

- N = 255
- M 男性: 26 (10.2%)
- F 女性: 229 (89.8%)

Morley et al. J Nutr Health Aging 2012;16(7):601-8

The prevalence of frailty increased with age

衰老發生率隨年齡遞增



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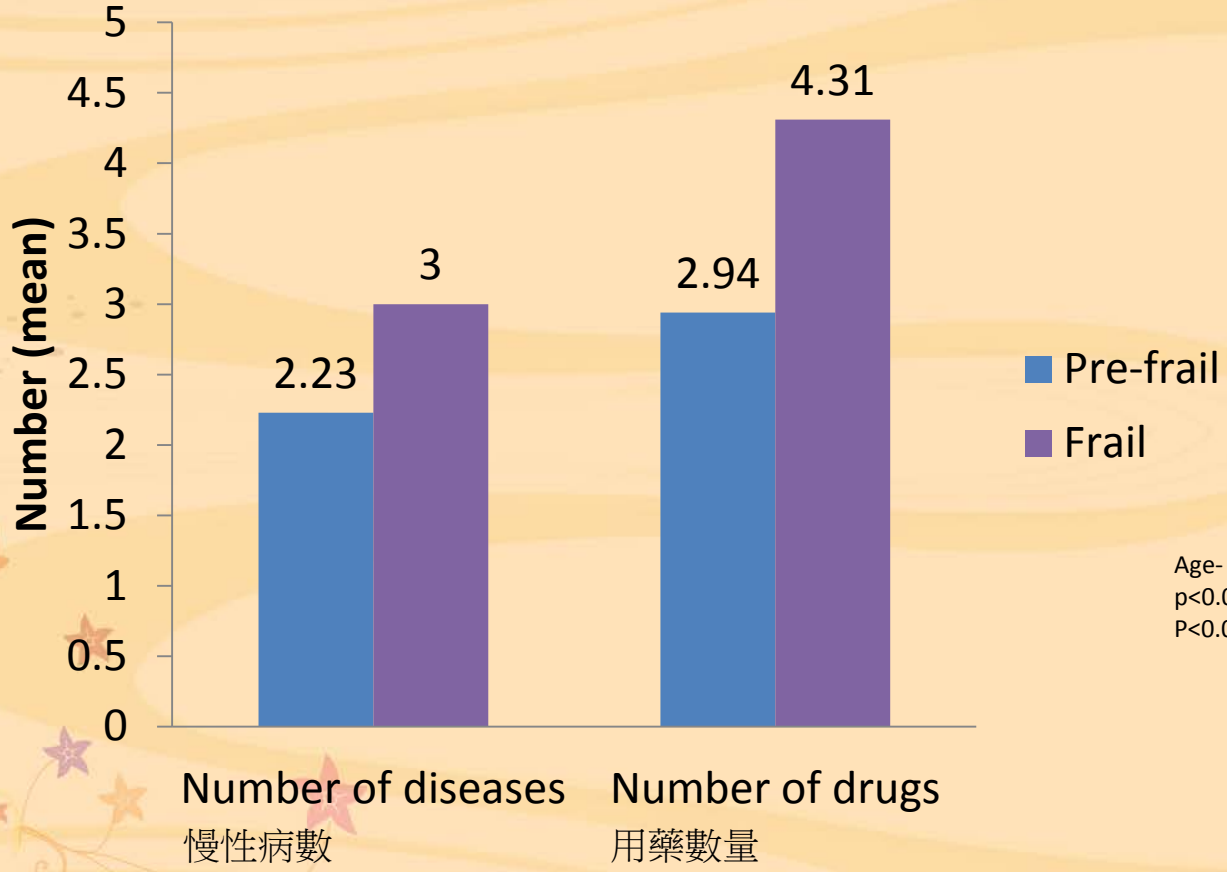
No. of chronic diseases and use of medications were positively associated with frailty

衰老與慢性疾病的數目及用藥數量有關



Age- and sex-adjusted
p<0.01 (no. of diseases)
P<0.01 (no. of drugs)

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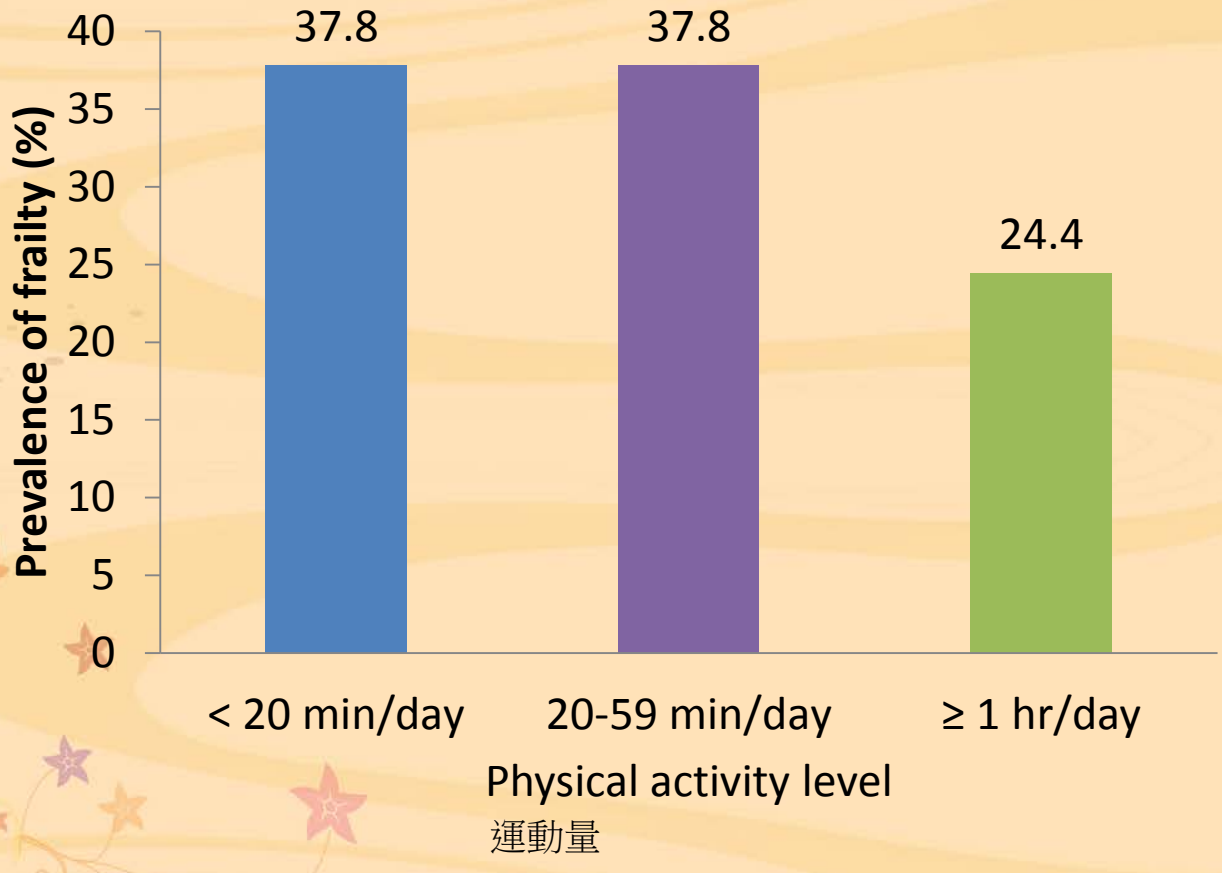
Higher physical activity level was associated with lower prevalence of frailty

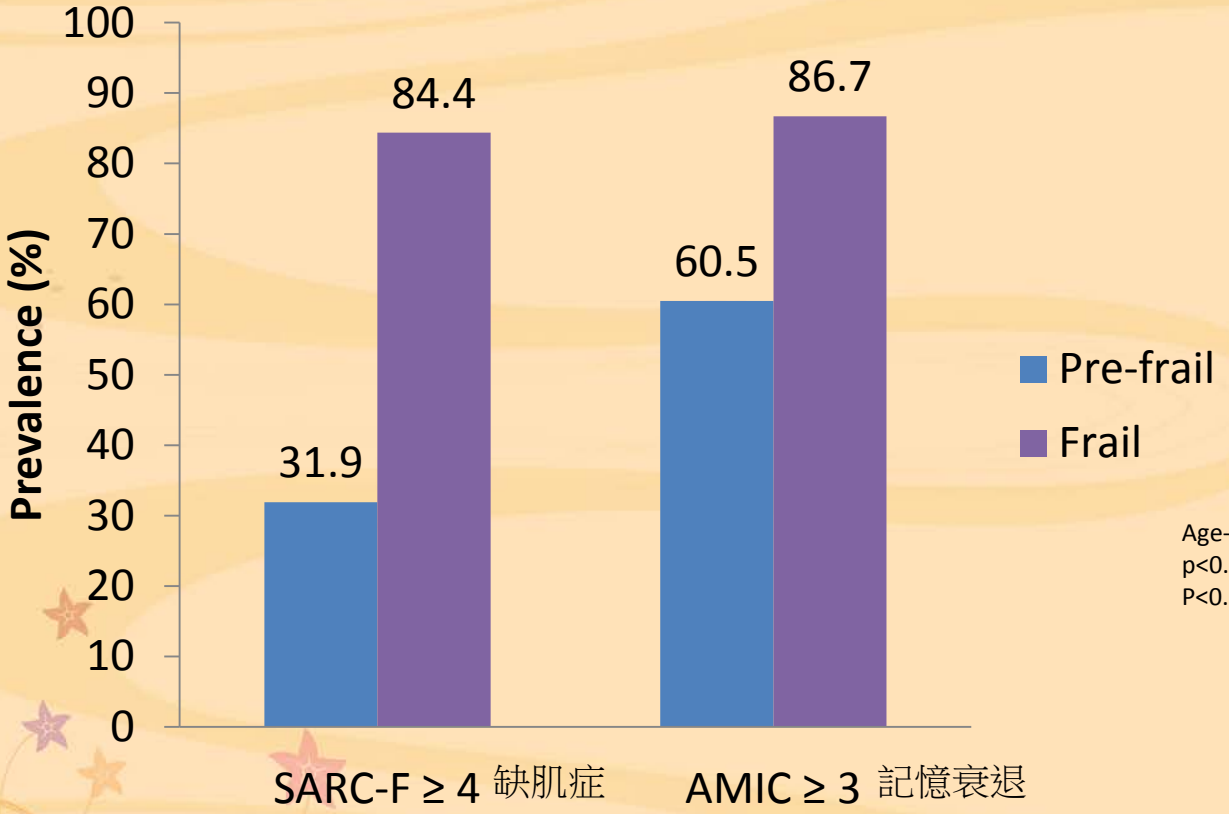
高運動量的長者有較低的衰老發生率



Age- and sex-adjusted
$p<0.05$

Sarcopenia and memory impairments were more prevalent in frail elderly compared to pre-frail elderly

相比屬於衰老前期的人士，屬於衰老人士的缺肌症及記憶衰退的患病率較高

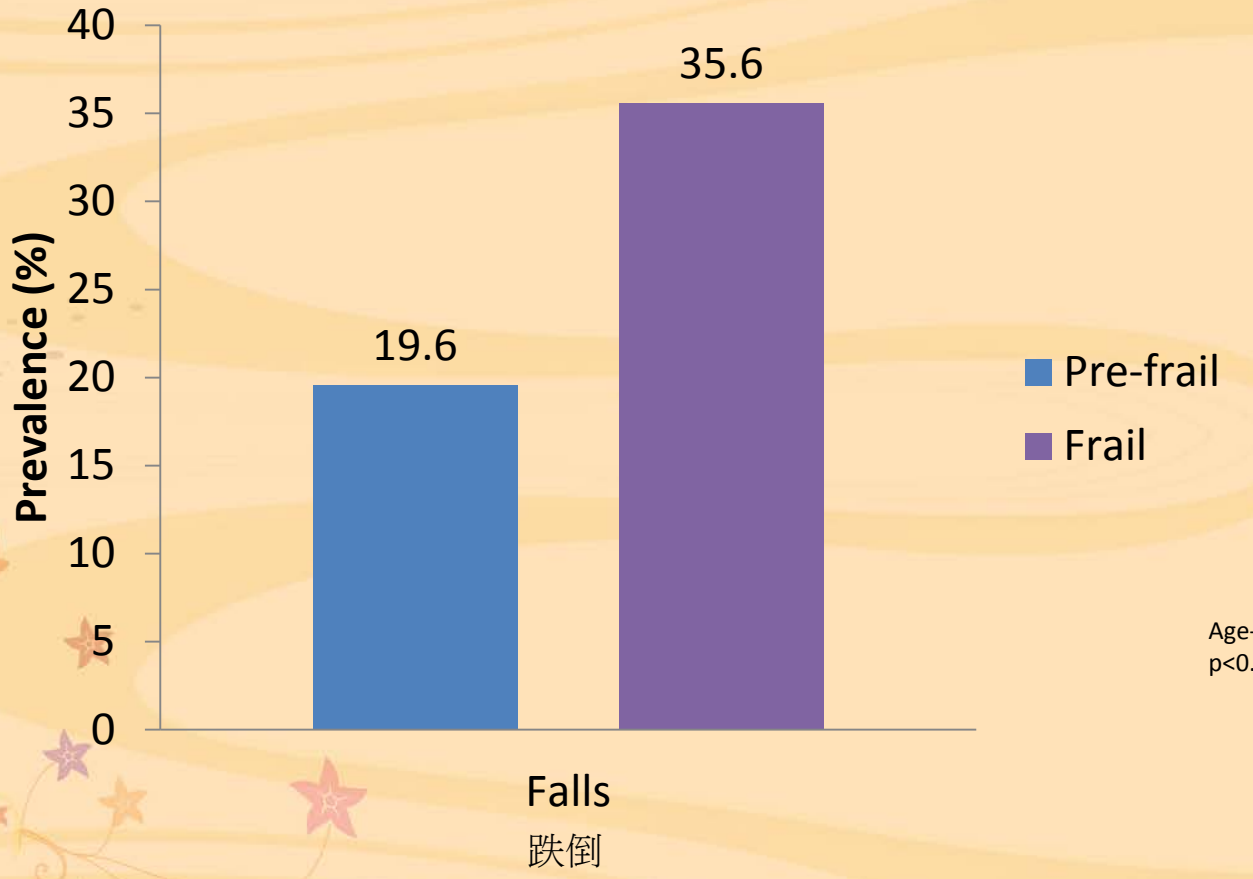


Age- and sex-adjusted
p<0.01 (SARC-F)
P<0.01 (AMIC)

SARC-F questionnaire for sarcopenia (strength, assistance with walking, rise from a chair, climb stairs, and falls)
Malmstrom et al. JAMDA 2013;14(8):531-2
AMIC, Abbreviated Memory Inventory for the Chinese for subjective memory problems and related complaints
Lam et al. Int J Geriatr Psychiatry 2005;20(9):876-82

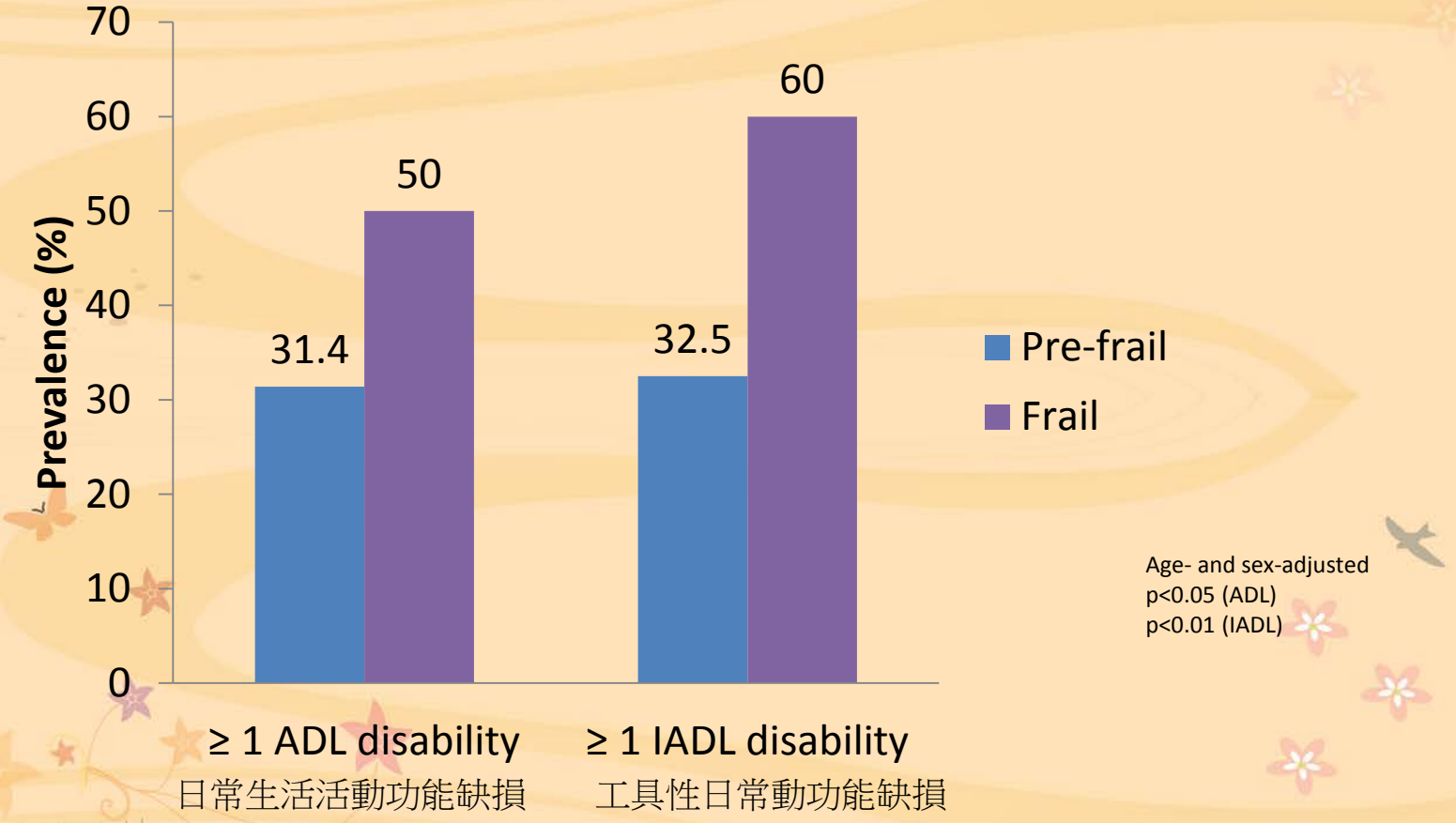
Falls were more common in frail elderly compared to pre-frail elderly

屬於衰老的人士比屬於衰老前期的人士更容易跌倒



Age- and sex-adjusted
p<0.05

Frail elderly had higher ADL and IADL disability compared to pre-frail elderly相比屬於衰老前期的人士，屬於衰老的人士的日常生活活動功能及工具性日常生活活動功能缺損較為嚴重

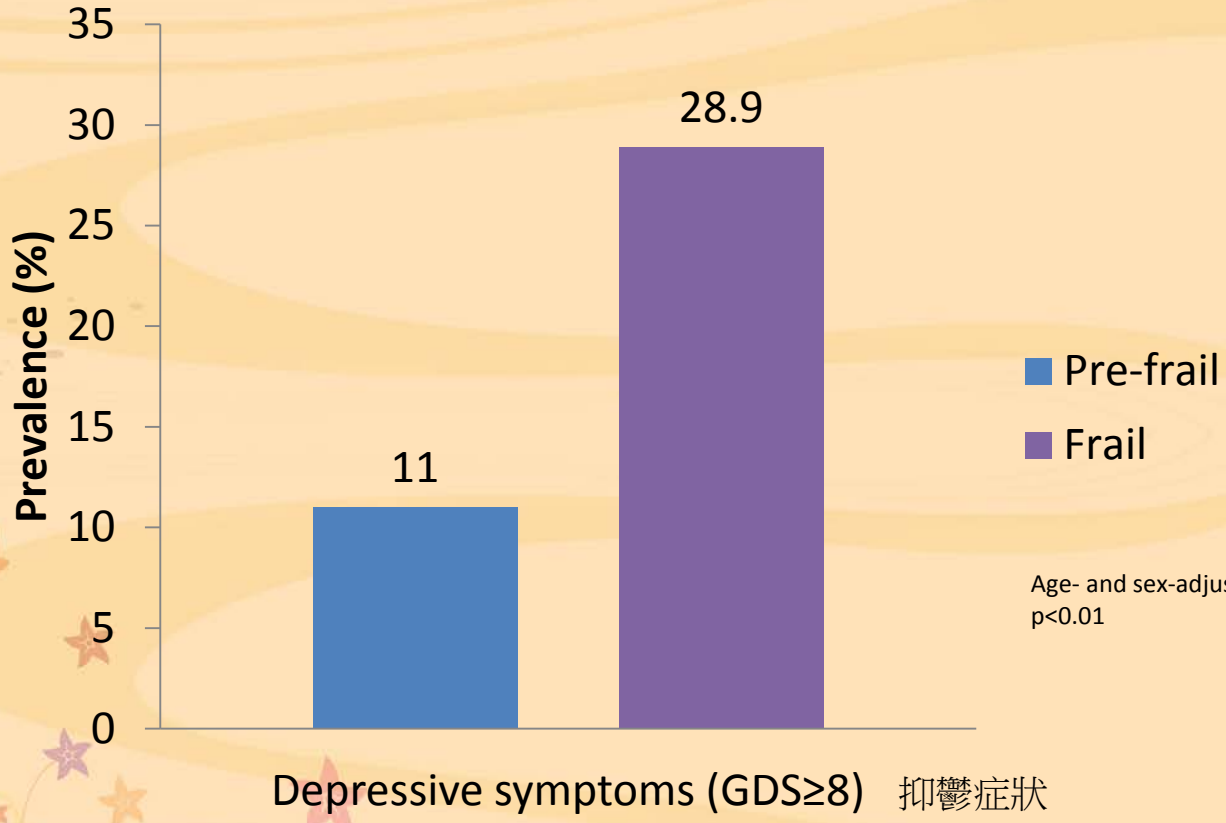


Age- and sex-adjusted
p<0.05 (ADL)
p<0.01 (IADL)

ADL, Barthel index of Activities of Daily Living. Total possible scores range from 0-20, with lower scores indicating increased disability
IADL, modified Lawton Instrumental Activities of Daily Living scale . Total possible scores range from 0-12, with lower scores indicating increased disability

Depressive symptoms were more common in frail elderly compared to pre-frail elderly

屬於衰老的人士比屬於衰老前期的人士有較多抑鬱症狀



GDS, Geriatric Depression Scale (15-item). Total possible scores range from 0-15, with higher scores indicating higher levels of depressive symptoms

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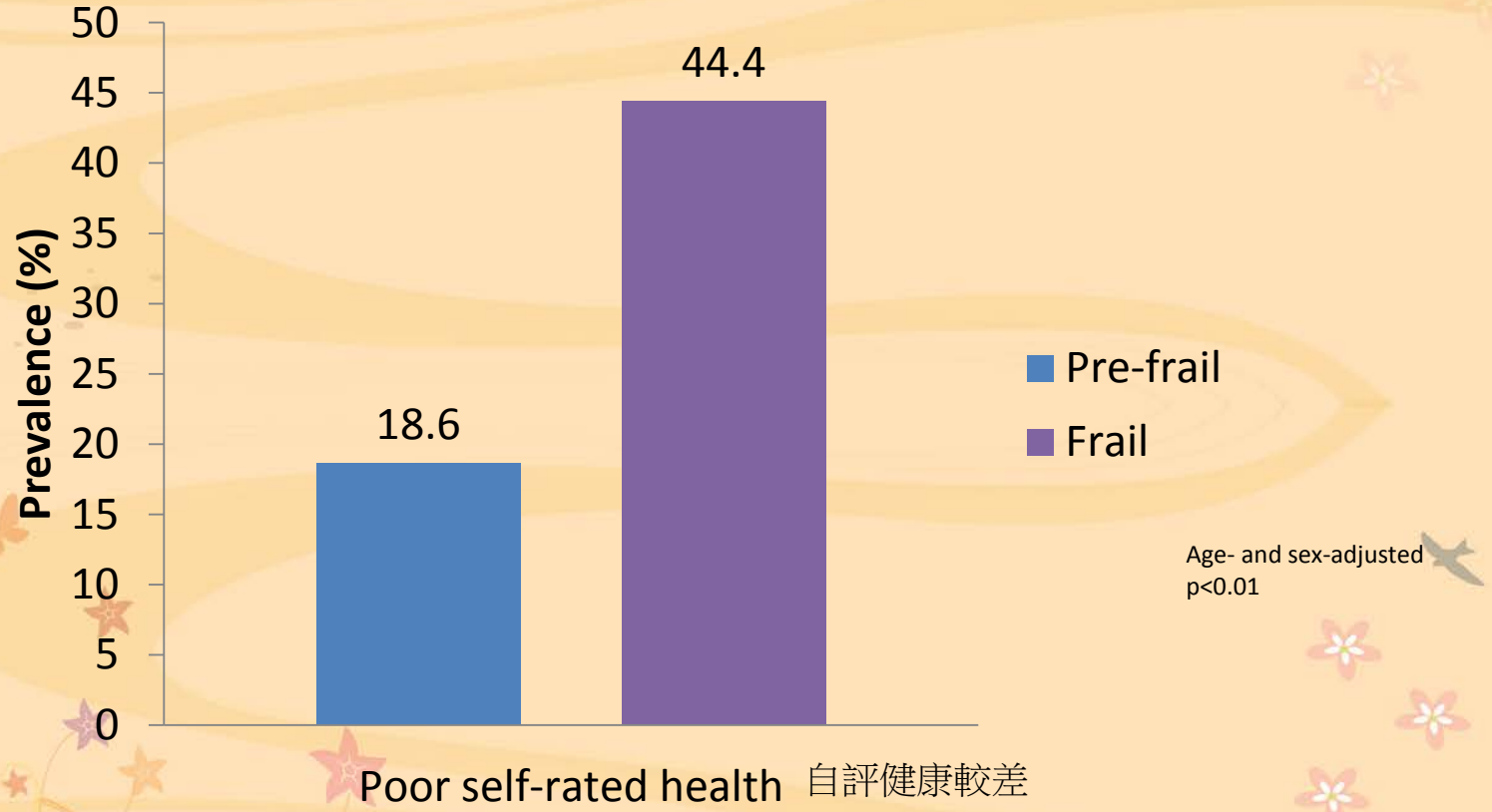
Frail elderly exhibited a higher risk for poor self-rated health compared to pre-frail elderly

屬於衰老的人士比屬於衰老前期的人士自評健康的程度較差



- In 2014, about 1 in 8 (12.5%) of community-dwelling population aged 65 and above had frailty
  在2014年， 約每八名年齡為65歲以上的社區人口中，便有一人屬於衰老(發生率為12.5%)

- Pre-frailty was also found to be common, more than half (52.4%) of the community-dwelling population aged 65+ were pre-frail
  衰老前期亦相當普遍，超過一半的65歲以上的社區人口(52.4%)屬於衰老前期

- The prevalence of frailty increased with age, with the rate of 5.1% for people aged 65-69 and 16.8% for those aged 75 and above age group
  衰老發生率隨年齡上升，由65-69歲年齡組別的5.1%上升至75歲及以上年齡組別的16.8%

- Older age, number of chronic diseases, use of medication, physical activity, sarcopenia, memory impairments, falls, ADL disability, IADL disability, depressive symptoms and self-rated health were factors associated with frailty
  年齡、慢性疾病的數目、用藥數量、運動量、缺肌症、記憶衰退、跌倒、日常生活活動功能及工具性日常動功能缺損、抑鬱症狀和自評健康是衰老的相關因素

Is frailty treatable?

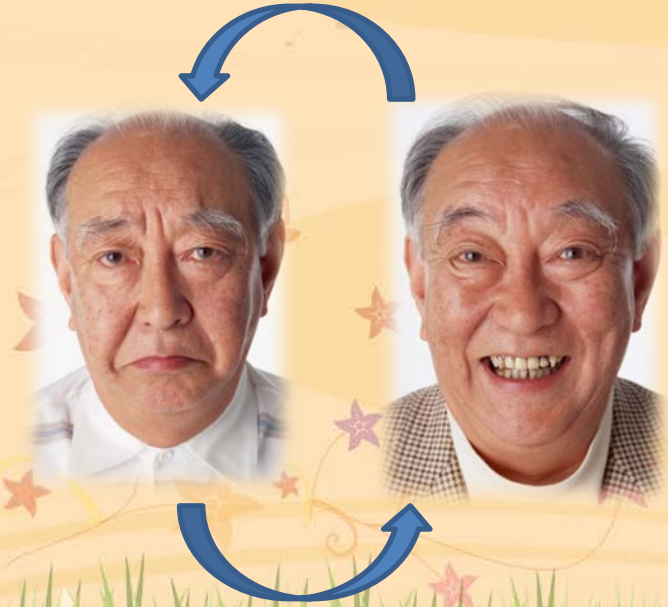
衰老是否可以醫治?

Frailty is not an inevitable part of ageing

衰老並非是老化必然的發生

Physical frailty (sarcopenia) is reversible

身體衰老(缺肌症)是可逆轉的



Yu R et al. Geriatr Gerontol Int 2014;14(suppl1):15-28
Lee J et al. J Am Med Dir Assoc 2014;15(4):281-6

Implications and recommendations
意義和建議

Increase public's awareness 提高公眾關注以下事項:

- Frailty is prevalent in older people
  老人患衰老的情況
- Older people living with frailty are at risk of adverse outcomes
  有衰老的老人有較高風險導致不良健康後果
- Physical frailty (sarcopenia) is reversible
  身體衰老(缺肌症)是可逆轉的

- Identify frailty at early stage in all settings
  及早發現衰老
- Provide training in frailty recognition to health and social care professional
  為從事醫護及社福界專業人員提供衰老辨認的訓練
- The FRAIL scale may be used by non-health care professionals as a community screening tool for frailty
  FRAIL scale可作為社區篩查工具，適合非醫療專業人員使用

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賽馬會全城起動防衰老計劃

- 由香港賽馬會慈善信託基金捐助為期3年的「賽馬會全城起動防衰老計劃」，於2017年至2019年在全港各區舉行

- 計劃以全面提升社區人士對衰老概念的認識及建立防衰老的生活方式為目標

- 內容包括：防衰老評估、防衰老教育講座及工作坊、全方位防衰老訓練課程等；歡迎五十歲或以上人士參加。

協辦機構:

聖雅各福群會
St. James Settlement

香港復康會
The Hong Kong Society for Rehabilitation

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賽馬會全城起動防衰老計劃

50歲或以上社區人士
Age≧50

評估篩查
Frailty Screening
N=9,000

健康講座
Anti-Frailty talk
N=3,000

防衰老工作坊Workshop
N=3,591*

24堂全方位衰老訓練Intensive Frailty Prevention Program
N=720**

防衰老錦囊
Health Kit
N=3,150***

訓練前評估
Pre-Assessment

訓練後評估
Post-Assesment

成效評估
Evaluation

活動手冊
Intervention Manual
N=1,000 staff

*N= 40% from 9000pps
**N= 10ppsx 24 class x 3 centres
***N=35% from 9000pps

How can we recognize frailty
如何辨識衰老

5-item FRAIL scale

- **Fatigue**
  Tired all or most of the time during the past four weeks
  在過去四星期你經常感覺疲倦
- **Resistance**
  Difficulty walking up 10 steps without resting or aids
  若沒有中途休息或助行用品協助下步上十級樓梯，你會感到有困難
- **Ambulation**
  Difficulty walking several hundred yards alone without aids (500-600 m)
  在沒有助行用品的協助下步行500-600米路程(不停步行約5分鐘)，你會感到有困難
- **Illnesses**
  5 or more illness
  已知患有5種或以上疾病
- **Loss of weight**
  Weight loss > 5% within the past month
  在過去一個月內減輕了5%或以上的體重

賽馬會 全城起動防衰老計劃

Morley et al. J Nurt Health Aging 2012;16(7):601-8

防衰老健康講座Anti-Frailty Talk N=3,000

讓公眾人士知悉何為衰老及預防衰老過早出現的重要性。並教導參加者在日常生活中如何防止及延緩衰老的方法 To introduce the concept of Frailty to the public, the importance of frailty prevention, what one can do in daily life to prevent or deteriorate frailty.

防衰老錦囊Health Kit for frailty prevention N=3,150

每位參加者經**5-item FRAIL scale**評估為0分；可獲贈防衰老錦囊，當中有關衰老知識及預防方法、包括運動、營養飲食及健康生活模式介紹 health Kit combining knowledge of frailty ,lifestyle modification to help frailty prevention and healthy ageing, will be delivered to people whose **5-item FRAIL scale = 0**

防衰老工作坊(一節) Frailty Workshop(1 session)N=3,591

A class launched by personal trainer for pre-frail & frail people to help them improve their health status and delay further deterioration對象是評估為衰老前期及衰老的參加者；由體適能教練教授健康生活模式，包括：營養飲食、家居運動等。

防衰老訓練班Intensive frailty prevention program(IFPP)

- 24節防衰老訓練班,每週兩節為期12周 (3個月) Each group of IFPP will last 24 sessions, two times per week for 12 weeks(3 months)
- 每節訓練班共兩小時；首小時由專業教練教授帶氧和負重運動，第二小時則由專責職員指導活腦訓練。Each session will last 2 hours, with one hour Cardio-pulmonary and weight training exercises by personal trainer and one hour brain training games.
- 參加者必須參與香港中文大學上課前、後的研究評估或聚焦小組 Participants must participate in research evaluations or focus groups before and after classes by Chinese University of Hong Kong