PROGETTO MATTONE INTERNAZIONALE

WORKSHOP

"Frailty Management and optimization through EIP-AHA: early diagnosis, screening and frailty management"

20th MAY 2015

Auditorium

Ministry of Health
Lungotevere Ripa, 1 – ROME

REGIONE LIGURIA

Ernesto Palummeri

Measurement of frailty in community-dwelling elderly people in Genoa.

Galliera General Hospital, Genoa

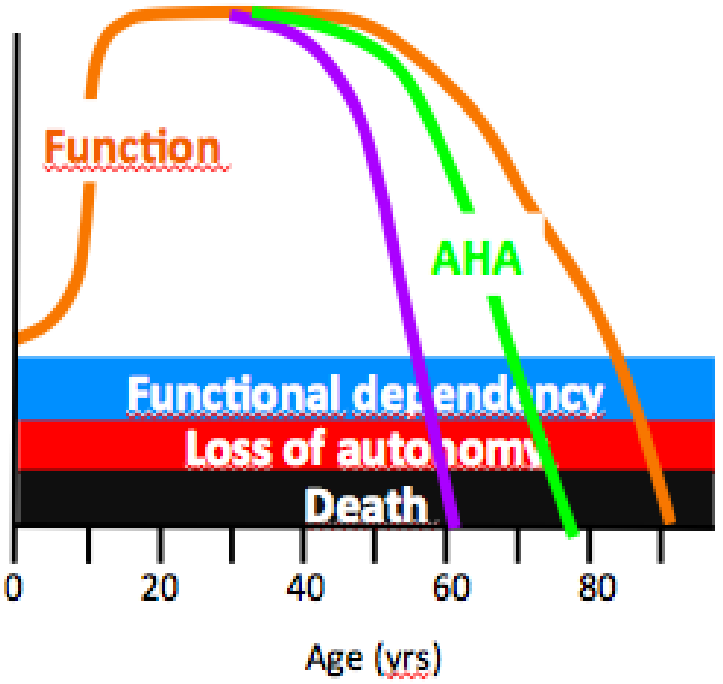
Regione Liguria RS for AHA

SUNFRAIL

Chronological age is not a precise indicator of functional decline

(Bergman,H.,Ferrucci,L.,Guralnik,et al. 2007, Frailty: an emerging research and clinical paradigm: issues and controversies. *J.Gerontol.A Biol.Sci.Med.Sci.* 62, 731–737)

The changes that accompany aging depend on genetic and environmental factors, and are lifestyle and life event related (WHO, 1999). Therefore, while some may remain healthy and resilient in later life, others may become increasingly vulnerable to internal and external stressors.



J.Bousquet et al, Int J Nutr Ageing, in press

The latter refers to a state of frailty.

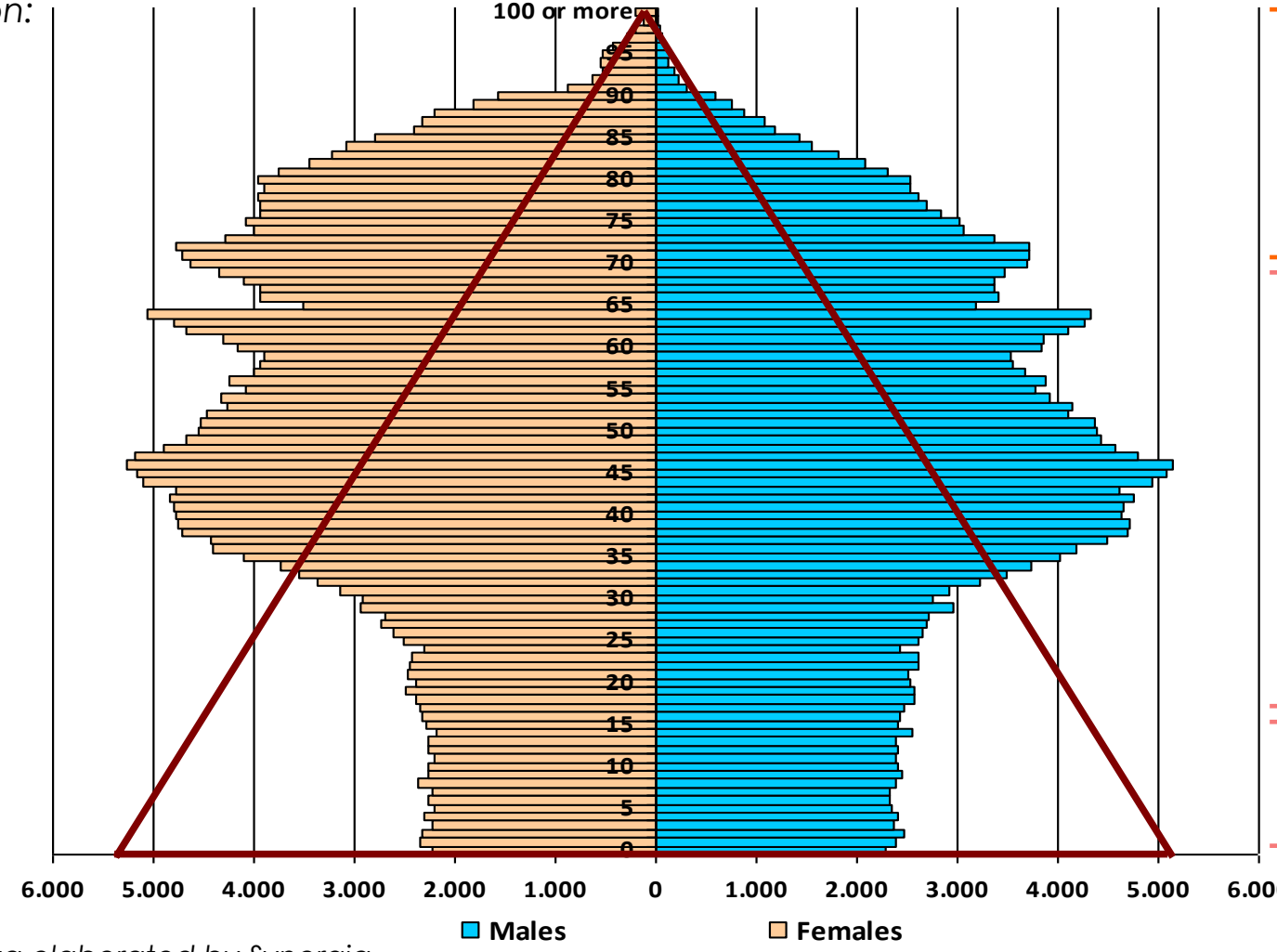
Tiago Coelho et al.Front. Aging Neurosci. 7:56. doi: 10.3389/fnagi.2015.00056 , e pub ***21 Apr 2015***

Genoa's Socio-demographic context/1

The age pyramid

Age pyramid of Genoa's population. Date 01st January 2011

Total Population:
607,906



>65 years old: 26.7%

(of which 15,1% > 85 years old)

15-64 years old:
61.8%

0-14 years old:
11.5%

Source: Istat, data elaborated by Synergia

geing index in Europe
(Source: Eurostat 2012)

Ranking	Country name	Ageing index
1.	Germany	157,1
2.	Italy	150,0
3.	Bulgaria	140,9
4.	Greece	135,8
5.	Latvia	129,9
6.	Portugal	129,4
7.	Austria	123,7
8.	Lithuania	123,3
9.	Croatia	120,0
10.	Slovenia	117,7
	LIGURIA	**238,0**
	EU 27	115,4

Trend of over 74 years old population in Liguria Region in the next 10 years and estimated needs in Nursing home beds

With a 1%/5 years decrease in frailty prevalence

	2015	2020	2025
Nr. Over 74 x1000	246	255	265
Nr. Frail x1000	42(17%)	41(16%)	40(15%)
Nr. NH (30%) x1000	12,6	12,3	12,0
Nr. NH (30%) x1000	13,2	13,8	14,4

Genoa FRAIL Project Objectives

To describe some clinical and socio-economic features of population in relationship to the urban district where they lived potentially related to frailty and pre-frailty status

To validate 2 screening questionnaires (SHARE and FRAIL)

Genoa FRAIL Project-1

(The project is still ongoing: estim.end of enrolling june 2015)

400 community-dwelling people aged over 70 years randomly extracted from the personal records of Genoa Municipality, who lived in 2 districts of the town (Castelletto and Cornigliano)

Questionnaires administered:
Frail and SHARE
Socio-economic parameters

Lifestyle habits:
Eating habits, smoking, alcohol consumption, physical acitivity (PASE-Physical Activity Scale for the Elderly)

Genoa FRAIL Project-2

(The project is still ongoing: estim.end of enrolling june 2015)

Comorbidity/pharmacotherapy
CIRS
No. drugs chronically

Anthropometry
Body Mass Index,

Nutritional status
MNA (Mini Nutritional Assessment)

Physical performance tests
Short physical performance battery (SPPB)
Handgrip strenght
4 meters Walking speed (from SPPB)
Timed Up & Go test

Genoa FRAIL Project

Preliminary data 1

(No.subjects=168)

	Total cases	Urban District 1	Urban District 2
No. Subjects	168	96 (57.1%)	72 (42.9%)
Males	96 (57.1%)	54 (56.25%)	42 (58.3%)
Females	72 (42.9%)	42 (43.75%)	30 (41.7%)
Mean age (years) ± SD	78.21 ± 4.64	79.99 ± 4.38	77.39 ± 4.84

(Mean Age UD 1 vs UD 2, p= 0.026)

	Total cases Mean (range)	Urban District 1 Mean (range)	Urban District 2 Mean (range)
Education (years)	9 (1-24)	13 (4-24)	6 (1-18)
Barthel Index	85 (44-100)	87 (71-100)	82 (44-100)
IADL	18 (0-18)	18 (7-18)	17 (0-18)
Physical activ.(PASE)	93.0 (0-447)	97.0 (0-217)	88.5 (0-447)

(Education UD 1 vs UD 2, p<0,001)

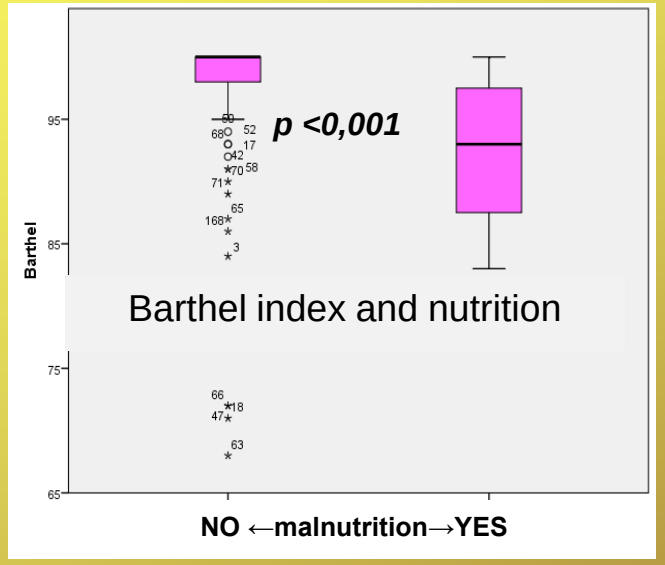
Genoa FRAIL Project
Preliminary data 2

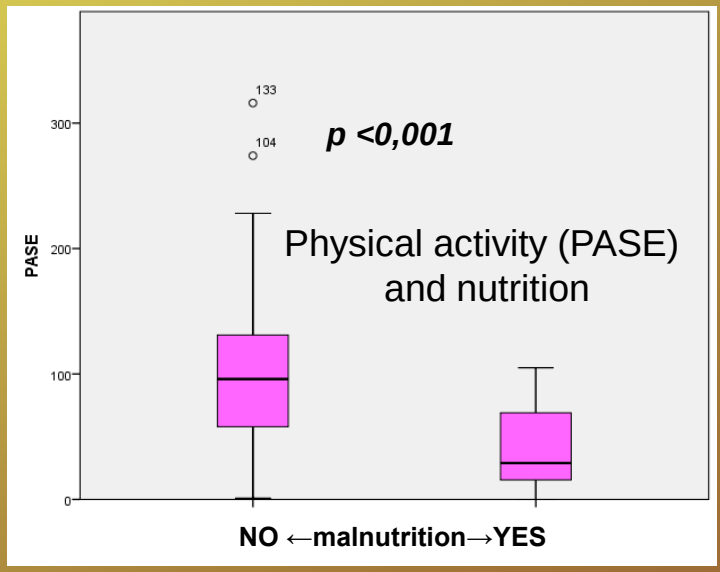
	Total cases Mean (±SD)	Urban District 1 Mean (±SD)	Urban District 2 Mean (±SD)
Timed Up&Go (sec)	**10,71±7,13**	**10,05±4,09**	**11,60±9,84**
4 meters walking speed (m/sec)	**1,06 ±,35**	**1,11±,36**	**0,99 ±,33**
Handgrip (Kg)	**21,99±10,26**	**23,17±10,07**	**20,43±10,37**
SPPB (score)*	**11 (0-12)**	**11 (0-12)**	**11 (0-12)**

**SPPB Median (range)*

Genoa FRAIL Project
Preliminary data 3

Mini Nutritional Assessment correlation with	r	*p*
FRAIL	**-0.307****	**<0.001**
SHARE	**-0.467***	**<0.001**





(Malnutrition = MNA<24)

Genoa FRAIL Project
Preliminary data 5

PASE correlations with	r	p
age	**-0.216***	**=0.005**
FRAIL	**-0.330****	**<0.001**
SHARE	**-0.470***	**<0.001**

PASE correlations wit	r	*p*
SPPB	0.328	<0.001
Hand Grip	0.168	=0.002
4 meters walking speed	0.155	=0.003
Timed up & go test	-0.279	<0.001

Conclusion

- Early identification of pre-frailty allows to realize interventions for preventing frailty
- We need standardized evaluation tools, both to screen population and to deeper clinical evaluation.
- CGA is a good instrument to detect a multidomain frailty syndrome.

Aging Clin Exp Res. 2010 Jun;22(3):219-30.

Improving health for elderly people: an international health promotion and disease prevention agenda.

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Abstract

Across the world, there are substantial but missed opportunities for promoting health of older persons and extending the healthy life span. ***Current approaches to health care rely on late detection and treatment of disease, and some of the most expensive systems of care have population health outcomes that are poor to mediocre.*** A majority of deaths and disability result from progression of preventable chronic diseases for which human behaviors are major contributing factors. An organized and aggressive agenda in health promotion and disease prevention emerges as an important part of the strategy to both promote health and control costs. After reviewing data on determinants of health and contribution of behavioral factors to morbidity and mortality, this paper presents the evidence for efficacy and effectiveness of specific behavioral and clinical interventions to reduce risk for many of the problems accounting for death and disability among elders. We address tobacco use, lack of exercise, inadequate nutrition, hypertension, delirium, obesity, falls, cancer screening, poor oral health, osteoporosis, immunizations and medication safety. Strategies for implementation of effective interventions present an international challenge.