VIVIFRAIL PROJECT

This whole project is based on the idea that health in older people should be measured in terms of its function and not as a disease that determines life expectancy, quality of life, and resources or supports that need each population. The objective is to maintain a level of functionality that maintains the highest degree of autonomy possible in each case.

Frailty syndrome is an age-associated syndrome, characterized by decreases in the functional reserve, strongly associated with sarcopenia that places older individuals at special risk for disability, hospitalization and death induced by falls (Campbell and Buchner 1997; Waltson and Fried 1999; Rockwood and Mitniski 2007; Rodríguez Mañas et al. 2012).

Most of the studies demonstrating improvements in gait, balance and fall risk have used multicomponent exercise training as intervention in their subjects. However, the studies in which systematic resistance training was performed (either alone or as part of multicomponent exercise programs) revealed greater strength gains in the frail elderly subjects.

The absence of changes in the functional and strength outcomes that were measured in some of the investigations indicates that the exercise prescription must be carefully adapted to provide a sufficient stimulus for improving the functional capacity of frail subjects.

According to literature reviewed, and also our own studies, this Project focuses on the enhancement of knowledge development, and implementation of good practices, as well as the design of materials that can give to know the physical exercise prescription as a way to effectively improve health on elder people among their environment.
The project will design a program for old people above 70, that promotes the practice of physical exercise to improve strength, gait ability and balance, while frailty and falls are prevented. For this, we propose to enhance the promotion and prescription of a multicomponent exercise program, creating synergies among the field of sport and the health and social care services.

These programmed interventions prescribed shall include resistance, balance, endurance and coordination training, besides multicomponent exercises that include resistance, as this specific type stimulates several components of physical health and appear to be the most effective for improving overall physical outcomes among frail old people, as well as for preventing disability and other adverse illness.
The plan for the project includes presential training or distance learning, and will target:

A. Home care assistants and professionals

B. Monitors managing exercise programs of Local Authorities, Retirement Clubs and Associations

C. Health staff from Primary, Secondary and Tertiary Care Centers

D. Medical and non-medical staff of retirement homes.

According to these general objectives, we’ve included the specific aims:

- To detect good practices and new experiences of work with older people, that have proven to be successful in participant countries
- To develop tele-based training programmes (TV-Channel, apps, Internet-based)
- To promote transnational fora with Experts and sport technicians.
- To design pilot experiences, through which Partners can implement the good practices detected during the study visits, in each country.
- To develop innovative awareness material for elder people, that can be distributed in retired people’s clubs, health centres and public places. It would include leaflets, brochures, guides.
- Design of training material for teachers about home assistance, that can be even included in the own Curricula of the educative center.
- To experiment with “transage” educational interventions in school, by connecting young and old exercise together to combat overweight and frailty.
Actions to be developed for these aims:

- Create a clear protocol for health, sport, education and social care services professionals, helping them to detect physical frailty and risk of falls, based on transnational meetings among partners.

- Design, develop and distribute material on beneficial effects of physical exercise for older people, and the practical way to carry it out at home.

- Develop a consensus Program of basic multicomponent exercises on traditional formats, but also electronically, based on the use of the Internet and New Technologies for patients at home, so that they can develop the exercise programme alone.

- Create, evaluate and implement clear exercise protocols to be performed with the patient hospitalized in their immediate environment (bed, bedroom, hallway, ground).

- Train and update health and social care services’ staff to assist the elderly boosting physical exercise practices, and help them carrying them out.

- Promote and recommend changes in lifestyle associated with physical exercise for frail patients at risk of functional decline.