
CONFERENCE ABSTRACT

An IT-supported multidimensional approach for frailty screening in community-dwelling older adults

23rd International Conference on Integrated Care, Antwerp, Flanders, 22-24 May 2023

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Introduction: Frailty in older adults is characterised by a dynamic state of vulnerability with weakness and reduced physiological reserve leading to an increased risk of worsening in quality of life, falls, institutionalisation, disability and death [1]. The COVID-19 pandemic is an example of how an infectious hit can determine an increased mortality especially among older and vulnerable population subgroups [2], as well as a deterioration in their quality of life due to loneliness and limited access to health and social services. Frailty syndrome is a complex interplay between several factors, including, but not limited to, natural physiological changes in ageing, multi-morbidities, malnutrition, living environment, genetics and lifestyle [3]. Early screening for frailty risk factors in the community-dwelling older adult population allows preventive interventions on the clinical and social determinants of frailty, avoiding adverse events and contributing to improve the resilience of health care systems.

Method: Programma Mattone Internazionale Salute (ProMIS), the Italian Ministry of Health's programme for innovation of regional health systems [4], built up a working group (WG) on Frailty, including doctors, nurses, home care professionals, physiotherapists, pharmacists, psychologists, dieticians, social workers, physical trainers and policy makers, to develop a proactive and integrated approach to detect frailty and its risk factors in community-dwelling older adult population.

Results: The participatory activity of ProMIS' WG led to the identification of an integrated approach aimed to connect the SUNFRAIL tool for the early identification of frailty in the over -65 population [5] to other in-depth scales for the assessment of specific dimensions of frailty, guiding subsequent diagnostic assessments for health promotion, disease prevention and intervention. An IT tool was developed for data collection, SUNFRAIL+, which includes, in addition to SUNFRAIL tools, the validated scales for screening the nine domains of frailty, which automatically generates alerts, thanks to which targeted interventions will be activated in the compromised domains. A national multi-centre observational study protocol has been designed to validate the approach by assessing the impact of early, integrated, and multi-professional care on the quality of life of the community-dwelling older adult population and the professional's satisfaction.

Conclusion and discussion: The study design builds on the tool developed by the SUNFRAIL EU project [6], and provides the background for bridging multidimensional interventions to prevent frailty and mitigate its consequences on quality of life and functional ability in community-dwelling older adults, exploiting available services in the different health care services. The study will also provide the information needed to design a logical model integrating coherent interventions in the framework of specific frailty domains.