Educational programmes for frail older people, their families, carers, and health-care professionals: A Systematic Review.

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BACKGROUND

The increasingly older population is resulting in more people living with frailty and requiring additional health care and personal support services.

The 'Frailty: Core Capability Framework' launched recently in the UK recommends frailty education for all frail older individuals, their families, carers and health professionals.

We report the findings of a Systematic Review of published reports that outline specific educational programmes for these groups.

OBJECTIVES

- To identify, describe and assess the variety of interventions for frailty education
- To synthesise the findings of the research studies
- To determine key themes within educational initiatives appropriate to the target population of older people living with frailty, families / carers and HCPs

METHODS

Inclusion and exclusion criteria: The Inclusion and Exclusion criteria (see **Table-1**) were set according to the standard 'PICO' domains framework (CRD, 2018) i.e. Population, Intervention, Comparison, Outcomes. MeSH headings were chosen to identify key aspects of interest in the publication. The three broad aspects of interest were Frailty, Education or Training, and Study Setting.

Table-1: Inclusion and exclusion criteria for the systematic review

This table shows the description of the population, intervention, comparison and outcomes (the PICO framework) used to define the inclusion and exclusion criteria of the systematic review.

	Description	Inclusion Criteria	Exclusion Criteria
Population	Older people living with frailty and their carers, families and health care practitioners.	Primary Care. Community. Secondary care. Specialist centres. Patient age group >65 years (as frailty is more common in this age group). Mild – moderate frailty. Severe Frailty.	Patient group under 65 years.
Intervention	Educational programmes including service initiatives and projects.	Involving frail patients, their families, carers and health care practitioners.	Prior to 2008 as most Frailty research occurred afterwards.
Comparison	Not applicable at the outset and no evidence found to the contrary during the Review.		
Outcome	Measurable results e.g. in clinical well-being or quality of life.	Full article available. English language. Studies that assessed outcomes or impact.	Non-English. Full article not available. Publications that did not assess outcomes or impact.

Screening and selection of publications: Two reviewers performed the selection in order to reduce the risk of bias and to increase accuracy. The initial search of the computerised databases yielded 769 papers. They were uploaded to reference manager software Refworks which highlighted only one duplicate title which was then removed. One reviewer reduced the number to 98 papers that underwent further screening of the abstracts by a second reviewer. This resulted in 30 papers and six conference plenaries.

- 26 papers were excluded by both reviewers
- (one opinion piece, one could not be accessed, two were non-research papers, six were conference plenaries which were not subsequently published, two were RCT protocols not published, and nine had ineligible participants according to the inclusion criteria. The repeat literature search revealed another six potential papers. One met the inclusion criteria but it was still in progress, no data was available and was subsequently excluded.

Data extraction and study quality appraisal: Data extraction was performed methodically across all papers using a structured data extraction form which was set up in electronic format that facilitated the comparison of data.

A single quality appraisal tool was not suitable due to wide heterogeneity of the studies. Four different tools were therefore chosen to cater for the variable study designs. All quality appraisal tools were applied objectively according to the standard recommendations for their use.

RESULTS

- The studies were variable in design and focus, with five (50%) of them undertaken in primary care, four (40%) in community settings and one (10%) within secondary care. The study populations were diverse and included older people, family members, a wide range of health care professionals, practitioners and care home managers. The sample size was also variable, ranging from 12 participants in a qualitative study with semi-structured interviews to 603 in a cross-sectional study. The study quality appraisal exercise graded 2 studies as high quality, 5 as medium quality and 3 as low quality.

Data analysis and narrative synthesis: A narrative synthesis was undertaken to bring together the findings from the studies, draw conclusions based on the body of evidence, and to then consider potential implications for future practice in the field of frailty education. The framework we used comprised of four elements:

(1) Organising the study findings to describe patterns across the studies and consider how the interventions work and for whom;
(2) Exploring relationships of study characteristics and findings within and between studies;
(3) Assessing how widely applicable the findings may be;
(4) Assessing robustness of the synthesis.

The synthesis highlighted 4 prominent thematic domains that are key elements to both prevention and management of frailty for all target populations and are demonstrated in Figure 1. Frailty must be addressed within a multimorbidity approach, The evidence highlighted the importance of maintaining active living and well being for older people.

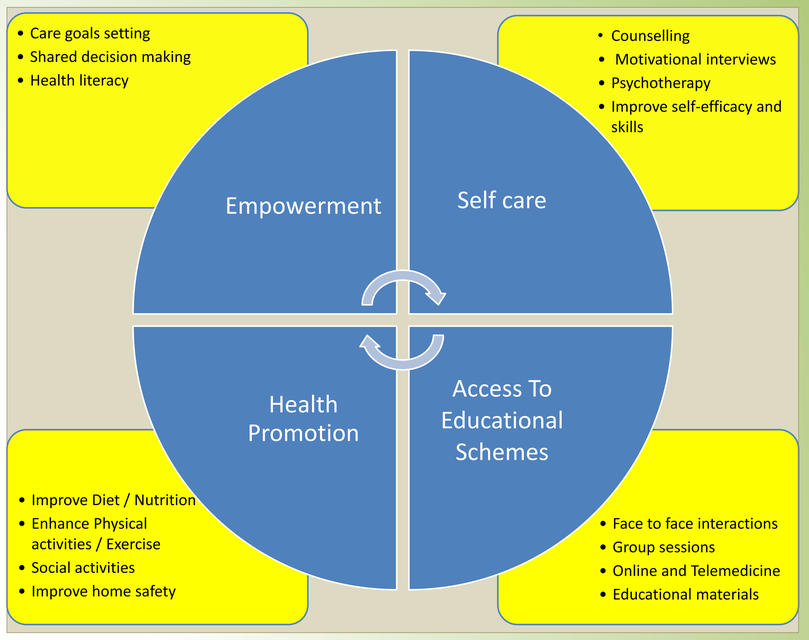

Figure 1: *Representation of the dynamic relationship of the themes and concepts found within the included studies; the thematic domains.*

Discussion: Educational programmes and initiatives are vital for the prevention and management of frailty and to be truly effective must include a combination of the four thematic domains; empowerment, self care, health promotion and access to educational schemes and be accessible to all target populations. The combination of exercise and nutritional programmes have been shown to have a positive impact on frailty status. Primary care services need to take a prominent role in promoting this. These key findings can usefully be considered within the context of the FCCF document. The papers evaluated in this review have demonstrated a practical feasibility of a wide range of different programmes together with favourable results of interventions, and whilst non of the studies incorporated a large proportion of the FCCF, there is clearly scope for more comprehensive educational programmes to encompass even more of the FCCF.

CONCLUSION:

This systematic review has found a range of evidence supporting self-management planning, exercise and nutritional educational intervention which has a positive impact on frailty status and quality of life factors, and compliments the FCCF.

Further work is needed to look at effective, accessible, sustainable delivery systems, including that of online digital platforms, suitable for all groups of people on whom frailty has an impact, be it the older people themselves living with frailty, their families, carers or health care professionals.

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