University of Nottingham
UK | CHINA | MALAYSIA

NHS
Nottingham University Hospitals
NHS Trust

Exploring the Thorny Issue of 'Rehabilitation Potential': A Mapping Review of Existing Evidence

Alison Cowley[1,2], Sarah Goldberg[2], Adam L Gordon[2,3] and Pip Logan[2,4]
1. Nottingham University Hospitals NHS Trust, 2. University of Nottingham, 3. Derby Teaching Hospitals NHS Foundation Trust, 4. Nottingham CityCare Partnership.

BACKGROUND

Older people living with frailty have more hospital admissions than young people, longer lengths of stay, greater use of social care and frequently have poorer outcomes [1, 2, 3]. After a stay in hospital they are often assessed and referred for programmes of rehabilitation. It is unclear how clinicians select older people living with frailty for programmes of rehabilitation or how they identify an individual's 'rehabilitation potential'.
The aim of this study was to carry out a review of the literature on rehabilitation potential in older adults to establish the rationale for the use of the term, how and why it is assessed.

METHODS

A mapping review approach was used which provides a rigorous and transparent method for mapping areas of research, identifying gaps in the evidence-base and for building theory [4]. They do not seek to weigh the effectiveness of a particular intervention or assign quality appraisal [5]. The strategy included MeSH, key words and cited literature search. Databases, searched from inception, included:
Medline (Ovid 1946-present), CINAHL Plus with full text (EBSCO), EMBASE (Ovid), AMED (Allied and Complementary Medicine, Ovid), PsycINFO (Ovid), PEDro, Cochrane Library and Web of Science.
Searches were completed by one reviewer and screening and data extraction by two independent reviewers against the inclusion criteria using a data extraction tool. Results were displayed in descriptive tables with a narrative approach.

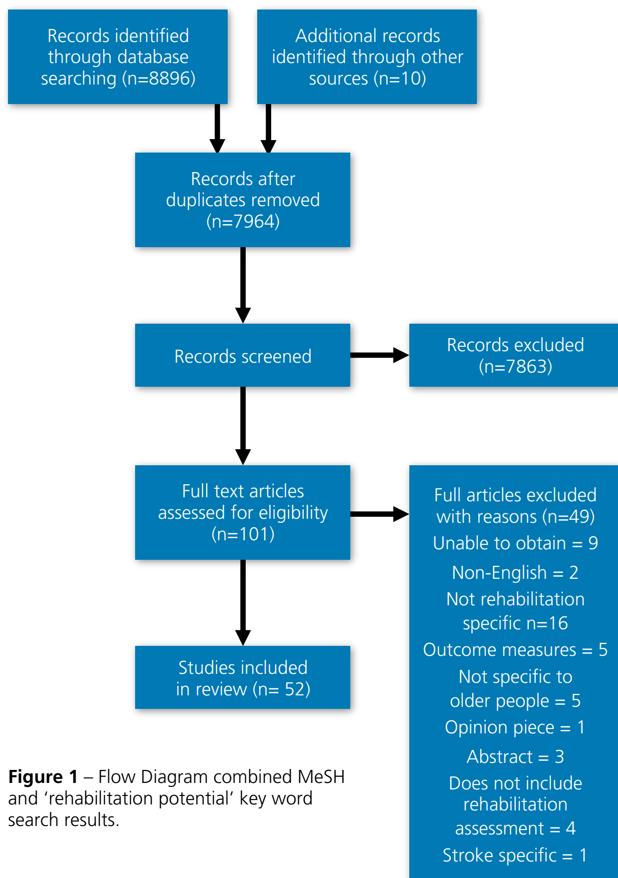

Figure 1 – Flow Diagram combined MeSH and 'rehabilitation potential' key word search results.

RESULTS

7964 articles were identified. 101 full text articles were assessed for eligibility. Fifty-two articles were included in the review (figure 1). Rehabilitation potential was found to be poorly defined with the term often being applied retrospectively. A holistic assessment was preferred but frequently with a medical bias and emphasis on physical domains and function. Rehabilitation potential was assessed as a dichotomous variable; as present or absent. Assessments of rehabilitation potential or suitability for rehabilitation were assessed as one off time points, often prior to admission or on admission to rehabilitation units. Numerous rehabilitation effectiveness outcome measures were identified, but there were limited tools specific to rehabilitation potential. No papers specifically explored rehabilitation potential in frail older adults.

DISCUSSION

The terms rehabilitation potential and rehabilitation effectiveness were used interchangeably but evidence suggests that they have differing theoretical underpinnings. The notion that rehabilitation is dichotomous; either it is there or not, fails to take into account the complexities of recovery and rehabilitation trajectories in older people living with frailty. If rehabilitation potential or suitability for programmes of rehabilitation is assessed on a one off basis, individuals with frailty risk being labelled as having no rehabilitation potential early in their recovery. Frailty affects more than physical and functional domains of health. Future tools to aid rehabilitation potential decision making should explore the wider holistic social, psychological and environmental needs of older people with living with frailty.

CONCLUSION

Further work is required to define rehabilitation in relation to frail older adults, how it is assessed, factors which influence clinical decision making and patient/family involvement in the process.

REFERENCES

1. Banerjee J, Conroy S, Cooke MW. Quality care for older people with urgent and emergency care needs in UK emergency departments. Emergency Medicine Journal. 2013;30(9):699. 2. Mudge A, Kasper K, Clair A, Redfern H, Bell J, Barras M, et al. Recurrent readmissions in medical patients: a prospective study. Journal of Hospital Medicine. 2011;6(2):61-7. 3. Aminzadeh F, Dalziel WB. Older adults in the emergency department: A systematic review of patterns of use, adverse outcomes, and effectiveness of interventions. Annals of Emergency Medicine. 2002;39(3):238-47. 4. Mays N, Roberts E, Popay J. Synthesising research evidence. In: Fulop N, Allen P, Clarke A, Black N, editors. Studying the Organisation and Delivery of Health Services: Research Methods. London: Routledge; 2001. p. 188-220. 5. Arksey H, Malley L. Scoping studies: towards a methodological framework. International Journal of Social Research Methodology. 2005;8(1):19-32.

Alison Cowley is funded by a NIHR/HEE Clinical Doctoral Research Fellowship (ICA). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health.
"The ICA Programmes is funded by Health Education England who work in partnership with the National Institute for Health Research who manage the programme."