

COMMENTARY

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Quo vadis geriatric rehabilitation?

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Abstract

The sustainability of healthcare of older people in Europe is at stake. Many experts currently focus on the COVID-19 pandemic and its consequences. But there are other elements coming up that might even have a greater impact. Healthcare systems, geriatric care and geriatric rehabilitation in particular, will face disruptive changes due to both demographic demand and a shortage of human and financial resources. This decade will be transformed by a high proportion of the older health workforce transitioning to retirement. This expertise must be retained. The brain drain of health care workers migrating from Eastern parts to Western Europe is diminishing. Discussing and deciding upon the priorities of value-based health care for older people such as equity and access is required. The acute healthcare sector in most countries focuses on fee-for-service models instead of building systemic approaches to maximise independence and autonomy of older citizens. In this commentary, we build on recent book chapters and articles on geriatric rehabilitation. Our main questions for the anniversary edition of *Age and Ageing* is what it is that geriatric rehabilitation could, should and must contribute in the roaring 2020s?

Keywords: older people, geriatric rehabilitation, post-acute care, intersectoral care models

Key Points

- Shorter length of stay, ageing in place policy and demographic change will drastically increase the demand for geriatric rehab.
- In- and outpatient models are needed.
- New emerging areas are structural heart disease, oncogeriatric conditions and post-COVID rehabilitation.

Introduction

‘The worldwide aging revolution has put rehabilitation for older patients high on the agenda of both healthcare policy and research. Two major policies in many high-income countries, ageing in place and reducing hospital stay, which particularly impact frail older persons, have stimulated the search for appropriate and cost-effective use of rehabilitation resources. This will require identifying patients who are most likely to benefit from geriatric rehabilitation and selecting the most appropriate rehabilitation or post-acute settings for each patient. The overall aims are to provide the right setting for the individual patient’ [1]. The world has changed dramatically since this editorial from 2019. What will geriatric rehabilitation look like ten years from now?

Who and where?

A 82-year-old woman suffered from an injurious fall leading to a hip fracture in December 2019. She had family support prior to the event. She was successfully operated and treated with orthogeriatric co-management. At this point her pathway and further treatment will not depend on evidence but on the particular place and country where she is living. In the UK, she would be discharged either to her home or an intermediate care facility. In Germany she would be referred to geriatric in-patient rehabilitation and in the Netherlands to a skilled nursing facility with a specialised rehabilitation unit. Healthcare systems are built on national traditions and less on evidence despite evidence showing that most patients benefit from intensive rehabilitation including

sufficient duration and frequency [4, 11]. In this case the patient was referred to a geriatric rehabilitation unit on day 6. She recovered from her mobility problems and transient cognitive impairment improved. She was discharged home after 3 weeks of in-patient rehabilitation. She was still mostly homebound. Two days per week a physiotherapist visited at home. After 8 weeks, she was able to leave her home independently to go shopping in her neighbourhood. Recent studies demonstrate the potential to restore mobility after discharge among patients with fragility fracture [17]. But appropriate care pathways are not a given for many countries [10].

For whom and how

From a societal burden of disease perspective, the key diagnoses leading to disability are stroke, fragility fractures, degenerative musculoskeletal and neurodegenerative conditions such as dementia and Parkinson's Disease [8, 16]. Patients with congestive heart failure, structural heart disease, oncogeriatric conditions and Chronic Obstructive Pulmonary Disease (COPD) are becoming increasingly relevant for geriatric rehabilitation as aggressive treatments and rapid discharge schemes lead to increasing demand [7]. Across Europe, the current COVID-19 pandemic has shown that geriatric rehabilitation has proven very beneficial to recover from the functional decline that infectious disease such as COVID-19 can cause [9].

Strategic discussions should start with the evidence. The Swiss geriatrician Stephan Bachmann summarised the evidence for rehabilitation from a geriatric perspective focusing on acute and sub-acute settings [2]. There is robust evidence of benefit for patients suffering from stroke [15], hip fracture [11] and COPD [13]. It is less known how comorbidities such as depression, dementia and sarcopenia affect rehabilitation success and sustainability [18].

Geriatric rehabilitation sits in the middle of a care network of acute, sub-acute and community care and often also long-term and palliative care. This network is essential in step-up and step-down care. Because it focuses on independence and participation, rehabilitation is essential for the European 'ageing in place' policy. From a patient perspective this often is currently not the case.

In-patient, out-patient rehabilitation and pre-habilitation

Physiotherapy and other forms of therapy need time. Training cannot be compressed deliberately.

Some countries have extensive in-patient rehabilitation facilities. Many countries also offer access to outpatient or community rehabilitation. The evidence for benefit from community rehabilitation in conditions such as elective hip and knee surgery and after a stroke is convincing [5]. Outpatient rehabilitation is different from in-patient rehabilitation, however, as it helps to attain higher participation goals, that go further than simple mobility and personal Activities of

Daily Living, and may take place in a normal domestic environment. It is much closer in outlook to value-based health care.

Rehabilitation ideas have been extended to 'pre-habilitation', intervention before a planned procedure. In many countries, we see a wide expansion of aortic valve replacement and treatment of other structural cardiac conditions. Such high-volume conditions should be considered for pre-habilitation. Similarly, successful treatment protocols for oncological conditions have led to a high number of patients undergoing long-term treatments that often lead to deconditioning. A number of small studies have looked at rehabilitation interventions between surgery and chemotherapy or radiation or intermittingly between different cycles of therapy.

The wishlist for the anniversary

The meaning of rehabilitation derived from the Latin origin refers to the return to the original place of living (re-habitate) of a patient and regaining and/or maintaining the civil rights of a person. This should be a self-evident goal for healthcare, and valued as such, but is often neglected in the face of more technological or acute-hospital based care.

Different healthcare systems have different healthcare spending [14], and better resources may lead to different outcomes. In the face of competition for resources, we need a policy focus shift away from acute and towards community, post- and sub-acute care. Prevention of frailty and sarcopenia should be part of a public health agenda to avoid accelerated functional decline.

Rehabilitation should be started as early as possible, which means that it has to be done alongside acute care, or that transfer from acute to post-acute care has to be earlier. Consequently, this will lead to a transfer, activity, expertise, complications and costs from acute to post-acute care [3]. Whenever possible rehabilitation should be delivered at the community level. We should and must include family carers as co-therapists. We should embrace the use of eHealth and technology as complementary to, and not as a substitute for, face-to-face therapy. All this implies new and different training and organisational needs.

We need rehabilitation because it helps patients address their problems and meet their goals. It has the potential to help prevent decline and complications, provides opportunities to restore lost function and helps us get the best out of other aspects of healthcare.

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