

**BEYOND ACUTE CARE: WHY COLLABORATIVE SELF-MANAGEMENT SHOULD BE AN ESSENTIAL PART OF REHABILITATION PATHWAYS FOR COVID-19 PATIENTS**

We welcome the recent articles published in the *Journal of Rehabilitation Medicine* highlighting the rehabilitation needs of patients affected by the COVID-19 pandemic. We would like to thank the authors for highlighting what we believe, and agree, are significant challenges following the acute management of patients with COVID-19. Khan and Amatya (1) explicitly state the organisational and structural needs that will be required in order to meet this challenge. Further, the call for action from Stam et al. (2) is timely, and asserts the necessity for the development, co-ordination, and delivery of inter-disciplinary rehabilitation to this patient group. As an adjunct to these suggestions, we propose that collaborative self-management strategies be considered as a key component within these inter-disciplinary pathways. We believe the rationale for integrating self-management strategies is essential given the recognised need for longer-term rehabilitation.

Our healthcare systems are currently consumed in responding to the acute care needs of patients with COVID-19. However, there will be subsequent stresses to our healthcare systems over the longer term. These include, handling the rehabilitation burden of COVID-19 patients post-acute care; managing emergency (and eventually non-emergency) non-COVID conditions within restricted resources; and managing the interrupted care of patients with long-term chronic conditions. These will be provided by a workforce with the collective fatigue and psychological effects of the acute pandemic.

Undoubtedly, the current situation is a huge challenge for hospital capacity. However, the models of care within the acute healthcare systems, along with the external support from organisations such as the military services (and others), are gearing up to assist with the operational management of this crisis. But what is the next step? Will rehabilitation services be helped and resourced in the same way?

Rehabilitation services acknowledge that new models of post-acute care for COVID-19 will be required and have begun to prepare accordingly (3). We propose that these models must include collaborative self-management to optimise patient outcomes and meet clinical demand. To do this effectively, a culture needs to be created that actively supports self-management as a normal, expected, and rewarded aspect of care (4). Self-management, is defined when patients are encouraged and coached to actively manage medical, lifestyle, or emotional elements of their condition (5). Self-management strategies are best practice care for management of longer-term conditions (6), and are

recognised as being important for patients recovering from acute illness and disaster situations.

Collaborative self-management is a complex intervention and it is not always the standard model of care for patients with long-term conditions despite the evidence-base (4). Therefore, to assume that the approach will automatically be adopted by rehabilitation services, who may not already use the model in routine practice, a culture change will therefore be required. This pandemic demonstrates the speed at which healthcare system norms can change, and it may be an opportunity for rehabilitation units who do not currently integrate self-management models into care, to adopt them.

To lay the foundations to promote collaborative self-management, leverage of intersectoral links will be required. Pathways of care with inter-disciplinary input led by rehabilitation medicine will be essential to emphasize treating the patient who is recovering from COVID-19, not disabilities resulting from impairments. Without this, there is a risk that patients will be concurrently referred and treated across different departments and silos of care. Avoiding the common trap of duplication of care and resource waste, along with communication failures that may occur between departments will need to be closely monitored by patients and health care professionals. In addition, the need to look beyond the formal health sector, and to seek collaboration with community groups, charities, and nongovernmental organisations will be important to provide the capacity and funding to help integrate patients back into society.

There will be core-components across these rehabilitation programmes for post-acute rehabilitation of COVID-19 patients. Patients will need the right information and skills to manage their recovery, and so education about COVID-19 and the sequelae of its acute presentation will be required. This will need to be adapted in line with the severity of illness, patient age, prior fitness levels, and pre-existing co-morbidities. To deliver this, health care professionals will need further training. This will need to include the emerging understanding of COVID-19, and the specialized knowledge/skills needed to facilitate behaviour change towards active self-management principles.

Amongst the medical and physical rehabilitation needs, patients will need specific advice on activity pacing, and managing the fatigue associated with recovery from acute viral illness, and associated complications. Supporting resources and information for patients should be made available through a number

of sources including online-guidance, live streaming, and video-consultations as technological systems allow. In whatever guise, it is clear that the blending of disciplines across healthcare systems are warranted to align with the inter-disciplinary needs of our patients.

For example, it is predicted that psychological input will be important (7). Patients may experience fear and anxiety relating to their acute care experience, the possibility of incomplete recovery, and societal pressures from the pandemic (e.g. loss of income due to economic crisis). In the acute stage of management, emphasis will be focused on biomedical treatments, but longer term, the patient will demand greater psychological and social support as they attempt to return to normal life (8). Individualising care at every aspect of a person's recovery will be important in order to support strategies within self-management programmes that facilitate increased adherence and commitment to treatment.

Planning for the implementation of self-management where it is not currently a routine component of rehabilitation pathways needs to start now. The benefits to patients must be introduced and promoted. In each local context, it will require a whole system approach, where it is clearly articulated how the COVID-19 rehabilitation pathway will be managed. This will be essential in helping our communities recover from the pandemic.

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