Rehabilitation
RESEARCH REVIEW™

Making Education Easy

Issue 62 – 2023

In this issue:

CLICK HERE
to read previous issues of
Rehabilitation Research Review

Welcome to issue 62 of Rehabilitation Research Review.

In selecting articles for this issue, it was exciting to come across a plethora of papers from New Zealand researchers and we have thus decided to go with a New Zealand theme. All of the chosen articles for this issue have a New Zealander as a lead author with affiliations including Auckland University of Technology, The University of Otago, The University of Canterbury, and the Medical Research Institute of New Zealand. Topics covered include a person-centric evidence-based model for rehabilitation, patient perspectives on neuroscience-informed physiotherapy, physical therapy-led falls prevention exercise in long-term care, Māori aspirations following stroke, and patient, carer, and health worker perspectives of stroke care in New Zealand.

I hope that you find the information in this issue useful in your practice and I welcome your comments and feedback.

Kind regards,
Professor Nicola Kayes
nicolakayes@researchreview.co.nz

Reflecting on challenges and opportunities for the practice of person-centred rehabilitation

Authors: Kayes NM & Papadimitriou C

Summary: This review examined the practice of person-centred rehabilitation and proposed opportunities for development of person-centred rehabilitation. The review identified challenges in person-centred practice which include a failure to implement a fundamental shift in practice and healthcare structures with more focus on patient choice and involvement in decision making and increasing patient capacity for self-management. Competing drivers and interests include systemic, organisational, and professional factors (biomedical orientation, key performance indicators, identity as expert). The review also identified opportunities for the development of person-centred rehabilitation including development of a principles-based approach to person-centred rehabilitation, a move away from the dichotomy of person-centred (or not) rehabilitation, building person-centred cultures of care in rehabilitation, and learning from diverse perspectives of person-centred rehabilitation.

Comment: I had the privilege of collaborating with my North American colleague, Christina Papadimitriou, on this paper. We had previously collaborated on a scoping review of evidence for person-centred rehabilitation (Jesus T et al., Arch Phys Med Rehab. 2021;102[10]:e116). This connection led to Christina and I collaborating on a joint symposium presentation at the 2020 American Congress of Rehabilitation Medicine focusing on person-centred rehabilitation. In preparation, we engaged in a series of in-depth and challenging discussions about person-centred rehabilitation while we debated, synthesised, and reconciled our thinking on the topic. In this paper, we share our perspectives drawing on relevant theory and evidence in person-centred rehabilitation as a way of inviting others into this debate and discussion. The aspiration of person-centred rehabilitation is embedded within rehabilitation professional competencies, in our service frameworks, and evaluated through our accreditation frameworks. However, people and whānau do not always experience our services as person-centred. Rehabilitation professionals themselves report challenges in meaningfully embedding person-centred ways of working into practice in the context of a health system which has a range of competing drivers and interests. In this paper, we reflect on these challenges and propose some opportunities for the development of person-centred rehabilitation. I hope you enjoy the paper. More importantly, I hope that it provokes some healthy debate, reflection and action for rehabilitation funders, organisations, and professionals in Aotearoa.

Reference: Clin Rehabil. 2023;Feb 1 [Epub ahead of print]
Abstract

A cohesive, person-centric evidence-based model for successful rehabilitation after stroke and other disabling conditions

Authors: McNaughton HM et al.

Summary/Comment: This is an interesting editorial which outlines an argument challenging some fundamental assumptions underpinning dominant biomedical approaches in stroke rehabilitation, including the premise that more therapy is better. They endorse the concept of "the right type of therapy delivered in the right dose at the right time for the person with stroke as a key tool" in rehabilitation but argue that this alone is not sufficient. They also contend that "successful rehabilitation of stroke and other disabling conditions requires acknowledgement and engagement of the 'whole person' and optimising personal motivation". The key evidence they draw on to support this argument is from their ongoing *Take Charge after Stroke* work (see: https://www.mrinz.ac.nz/programmes/stroke). While there are a few points of contention that could be debated in their argument, I support the broad tenets of their point. *Take Charge* provides a useful template for operationalising their 'whole person' approach. It is also useful to consider the core principles of their argument and how they may be usefully taken up in practice more generally, whether in the form of *Take Charge*, or not. *Take Charge* is strongly aligned with Self-Determination Theory (SDT) which argues that three core basic psychological needs (autonomy, competence, relatedness) are important for well-being and autonomous motivation. SDT also proposes a more nuanced understanding of motivation as a continuum from amotivation to more autonomously regulated motivation. While SDT distinguishes between extrinsic and intrinsic motivation, their more nuanced explanation highlights there are several types of extrinsic motivation, which vary with respect to the associated level of internalisation and integration with self. Some questions we could be asking ourselves include: How might we more explicitly attend to and address basic psychological needs in rehabilitation? How might our rehabilitation processes create the context for people to become more autonomously motivated?

Reference: Clin Rehabil. 2022;Dec 20 [Epub ahead of print]
Abstract

'Thinking about pain in a different way': Patient perspectives of a neuroscience-informed physiotherapy programme for rotator cuff-related shoulder pain

Authors: Acker R et al.

Summary: This qualitative study used semi-structured interviews to assess the perspectives and experiences of 10 participants with rotator cuff-related shoulder pain (RCRSP) of ≥ 3 months who completed a programme of pain neuroscience education (PNE)-informed pragmatic physiotherapy. Thematic analysis identified four main theme themes: 'Patient Beliefs', 'Rapport and Relationship', 'Perspective and Understanding of the Resources' (describing diverse uptake of the resource information) and 'Empowerment: My Shoulder into the Future', describing self-management skills, active coping strategies and a reduction in fear of pain.

Comment: In this paper, the authors refer to PNE-informed pragmatic physiotherapy. 'Pragmatic physiotherapy' refers to physiotherapy provided based on the clinician's assessment of the individual person and included a combination of manual therapy and exercise prescription. 'PNE' refers to an educational intervention which aims to reconceptualise one's understanding of their pain experience, including a shift from a pathoanatomical focus to a more multi-factorial understanding of pain. 'PNE-informed' refers to a set of PNE resources that could both guide the conversation during physiotherapy sessions tailored to individual circumstances, and which could be made available to the person to engage with independently. The focus of this paper was on exploring experiences and the usefulness of the PNE-informed pragmatic physiotherapy from the perspectives of people with RCRSP. If you are interested, future papers will report more fulsome findings of the larger feasibility trial. The findings are interesting. Key points of interest include: a) that people come with a range of pre-existing beliefs about pain and expectations of physiotherapy based on past experiences, highlighting the powerful role previous healthcare encounters have on subsequent health interactions; b) that there were diverse perspectives on the PNE resources ranging from a high level of resonance to those who did not identify with it at all or described it as 'airy fairy'; c) therapeutic relationship was perceived as important and may create the context for challenging preconceived ideas; and d) the physiotherapist being able to tailor and contextualise the PNE resources to individual circumstances may have helped improve resonance for people. Regardless of the diversity of experiences and perspectives shared, the findings appeared to show this approach has the potential to provide reassurance and hope and may equip people with tools to better manage their pain. The authors emphasise the importance of physiotherapists moving beyond their role as 'hands-on' or exercise therapist, to that of coach and facilitator.

Reference: Musculoskelet Sci Pract. 2023;63:102691
Abstract

"It's all about the money": An interpretive description of embedding physical therapy-led falls prevention group exercise in long-term care

Authors: Binns E et al.

Summary: The Staying UpRight (SUp) randomised controlled trial assessed a progressive strength and balance group exercise programme in older adults living in long-term care (LTC) and demonstrated improvements in physical function with no adverse events. This qualitative study conducted alongside the SUp trial used interpretive description methodology to assess factors affecting 15 long-term care providers' decisions to continue the programme after the funded trial. Semi-structured interviews and focus groups indicated that some facilities had initiated practice change with some starting exercise groups, increasing the number of exercise groups offered and physical therapists adopting elements of the programme into their practice. However, SUp continuation was constrained by organisational decisions about funding and resources that were determined by three factors; business models and philosophies, requirements for evidence, and valuing of physical therapy.

Comment: The authors set the context well, the falls rate for older adults living in LTC is high and this may be compounded by staff restricting mobility due to falls risk. Falls-prevention programmes embedded in LTC settings have the potential to improve function and address risk, but it remains unclear what would support sustainability of such programmes as part of routine service provision. This research explored what would help or hinder implementation of a specific programme, the SUp Programme. Findings highlighted a number of barriers that would limit the likelihood of SUp being made routinely available in LTC settings including tensions between fiscal and care provision responsibilities, lack of specificity in service specifications, and limited appreciation for the specialist role of physiotherapists in falls prevention initiatives. These challenges were particularly evident in 'for-profit' organisations where cost and return on investment were critical factors in decision making. In these contexts, there is a risk that even if implemented, the drive for cost-efficiencies would mean the programme would be unlikely to be implemented as recommended. These findings are particular to the implementation of falls prevention programmes in LTC settings. However, they make visible the often-invisible organisational drivers and levers that may help or hinder uptake of new initiatives more generally. Understanding the context in which rehabilitation interventions are to be implemented and addressing factors that could lever change may be critical to sustainability of new initiatives.

Reference: BMC Geriatr. 2023;23(1):14
Abstract

Rehabilitation
RESEARCH REVIEW™

Māori aspirations following stroke: A pathway forward for the speech-language therapy field

Authors: Eustace M et al.

Summary: This study examined the experiences and aspirations of four Māori stroke survivors, two whānau members, and five speech-language therapists in Aotearoa New Zealand about speech-language therapy service provision using Kaupapa Māori research and interpretive description methodologies. Semi-structured interviews and constant comparative analysis were collaboratively interpreted during a hui between researchers and participants and identified six themes spanning experiences and aspirations: (1) tautoko (support), (2) kaupapa Māori (Māori approach), (3) whanaungatanga (relationships), (4) tino rangatiratanga (autonomy), (5) taiao (environment), and (6) kōnekeneke (change).

Comment: While this research sought to explore the perspectives of Māori following stroke in the context of speech and language therapy, I suspect the findings are transferable to other rehabilitation settings. The findings also resonate with work that has been undertaken by others in this space such as Karen Brewer (McLellan KM et al., Int J Speech Lang Pathol. 2014 Oct;16[5]:529-40) and Bobbie-Jo Wilson (Wilson B-J et al., Brain Impairment 2022;23:9-23). In brief, some key take homes from me include a need for: 1) support which attends to one's whole self and identity as Māori, and the recognition that this may look and feel different from the type of support one might provide tauiwi; 2) community awareness around stroke and its effects to enable whānau and community supports; and 3) a critical look at structures that hamper the development of meaningful relationships in stroke rehabilitation (between patients and practitioners, across professionals, with Māori health providers, and with whānau and communities). But don't rely solely on my brief commentary, there is so much more to be said. This paper is an easy read and I encourage you to engage with it in full.

Reference: Aphasiology 2023;Feb 3 [Epub ahead of print]
Abstract

Brain Injury Screening Tool (BIST): Test-retest reliability in a community adult sample

Authors: Shaikh N et al.

Summary: This community-based test-retest trial assessed the reliability of the Brain Injury Screening Tool (BIST) for initial assessment of mild traumatic brain injury (mTBI) in 68 adults who had not experienced mTBI within the last 5 years. BIST total symptom score and subscales (physical-emotional, cognitive, vestibular) had moderate to good test-retest reliability (intraclass correlation coefficients 0.51-0.83) and no meaningful differences between symptom reporting on the total scale or subscales between test and retest.

Comment: This is a good read. It is a little complex as it grapples with some challenging concepts in measurement science. But it is worth persevering and engaging with, even if you don't work in brain injury and will never use the BIST in practice. It offers some insights into important challenges and decisions in the development and testing of screening tools that are important to be aware of when using those tools in practice. A key example in this research was the balancing act with respect to excluding people with high variability in mood symptoms (to meaningfully assess stability of the measure), while recognising the importance of including those with high anxiety and depression more generally (to maintain ecological validity of the measure). On balance, the BIST showed evidence of good stability in a non-injured, community adult sample. It is important to note that, while the BIST was developed for people ≥8 years old, the sample in this study only included people ≥16 years old. The research builds on a growing body of work reporting the development and testing of the BIST. You can find more information, published work, and the tool itself on the TBI Network website: https://tbin.aut.ac.nz/support-and-resources/brain-injury-screening-tool-bist.

Reference: BMJ Open 2022;12(8):e057701
Abstract

Co-design of an educational resource with female partners of male stroke survivors to support physical activity participation

Authors: Calder A et al.

Summary: This co-design study developed an educational resource for female partners to support male stroke survivors' participation in physical activity in partnership with 13 support people who participated in four participatory action research cycles. Three themes informed development: (1) managing an unwanted and challenging life, (2) inconsistent access to useful information, and (3) considerations for successful physical activity participation.

Comment: This is a good example of the value of engaging people and whānau in the co-design of health resources. In this case the researchers worked with partners of male stroke survivors to co-create a guide to supporting their partners to engage in physical activity. As well as resulting in the development of a prototype which is downloadable from the journals supplementary materials (https://www.mdpi.com/article/10.3390/ijerph192416856/s1), the findings provide important insights into the experiences and perspectives of the female partner participants which have practical utility for practice in their own right. For example, it is clear that existing resources and information provision is woefully inadequate, it is often overwhelming, poorly timed, and difficult to contextualise in relation to one's own personal circumstances. While physical activity is encouraged, there is often limited information about what, how and where. The participants offer practical guidance on addressing these limitations, including the importance of incorporating information and support about investing in their own health and well-being in the context of an "unwanted and challenging new life".

Reference: Int J Environ Res Public Health. 2022;19(24):16856
Abstract

Time spent reading this publication has been approved for CNE by The College of Nurses Aotearoa (NZ) for RNs and NPs. For more information on how to claim CNE hours please **CLICK HERE**.

This Research Review has been endorsed by The Royal New Zealand College of General Practitioners (RNZCGP) and has been approved for up to 1 CME credit for the General Practice Educational Programme (GPEP) and Continuing Professional Development (CPD) purposes. You can record your CME credits in your **RNZCGP Dashboard**.

Independent commentary by Professor Nicola Kayes

Professor Nicola Kayes is Director of the Centre for Person Centred Research at Auckland University of Technology. Nicola has a background in health psychology and as such her research predominantly explores the intersection between health psychology and rehabilitation. She is interested in exploring the role of the rehabilitation practitioner and their way of working as an influencing factor in rehabilitation and whether shifting practice and the way we work with people can optimise rehabilitation outcomes. Nicola actively contributes to undergraduate and postgraduate teaching in rehabilitation at the School of Clinical Sciences at Auckland University of Technology.

Developing a conceptual framework for early intervention vocational rehabilitation for people following spinal cord injury

Authors: Dunn JA et al.

Summary: This synthesis of a literature review and interviews of 30 people with spinal cord injury and a survey of 37 people with spinal cord injury who received early intervention vocational rehabilitation (EIVR), developed a conceptual framework examining the mechanisms of EIVR effects. The conceptual framework suggested that EIVR programmes ensure consistent messaging across the multi-disciplinary team, thereby establishing and maintaining hope that a return to work is possible following injury. Conversations about work also allow individuals to determine the priority of a return to work and improve self-efficacy by providing individualised support that allows participants to envisage pathways toward return-to-work goals and the maintenance of a worker identity.

Comment: This research draws on realist methods. The benefit of realist methods is that it moves beyond exploring what works at a population level to dig into what works, for whom and in what circumstances. In this instance, the focus was on trying to understand how different people respond to resources provided through EIVR following spinal cord injury. This is important given not everyone responds to EIVR in the same way and better understanding who responds and in what circumstances will help to inform how we might tailor EIVR to better meet people where they are at. The synthesised findings provide useful direction regarding the key elements of EIVR that are likely to contribute to better return-to-work outcomes, with the central mechanism being the "establishment and maintenance of hope by consistent messaging and continuity of messaging across the whole multi-disciplinary rehabilitation team that work is possible at some point following injury". The outcome of this work is a conceptual model which could be a blueprint for the development of EIVR in other settings and populations.

Reference: J Occup Rehabil. 2022;Aug 4 [Epub ahead of print]
Abstract

Patient, carer and health worker perspectives of stroke care in New Zealand: A mixed methods survey

Authors: Thompson S et al.

Summary: This survey used a mixed methods approach to identify 53 consumers' (person with stroke/family member/carer) and 41 health workers' perceptions of stroke care services, access barriers, and service centralisation. Overall, 40 of 46 (87%) consumers rated stroke care as 'good/excellent' versus 24 of 41 (58.6%) health workers. 72% of consumers preferred transfer to a specialised hospital. Three major perceptions of stroke care themes were identified: (1) 'variability in care by stage of treatment', (2) 'impact of communication by health workers on care experience', and (3) 'inadequate post-acute services for younger patients'. In addition, four barriers to access were identified: (1) 'geographic inequities', (2) 'knowing what is available', (3) 'knowledge about stroke and available services', and (4) 'healthcare system factors'.

Comment: This research reports on the outcome of a mixed methods survey exploring patient, carer, and health worker perspectives of stroke care in New Zealand. It provides a reasonable litmus test regarding the current state of stroke care as experienced by those accessing and delivering services. The findings are perhaps not a surprise. The period post-discharge from inpatient stroke care remains the most challenging with lack of timely access to rehabilitation services and/or length of follow-up being identified by all participant groups as a key gap. There were some variations in gaps identified in other areas with patients and carers highlighting communication as a key area of concern for them, while service provision for younger stroke patients was identified as a key gap by health workers. Regardless, the findings point to some important priorities for future service improvement.

Reference: Disabil Rehabil. 2022;Sep 5 [Epub ahead of print]
Abstract

Perceptions of a self-guided web-based exercise programme for shoulder pain after spinal cord injury: A qualitative study

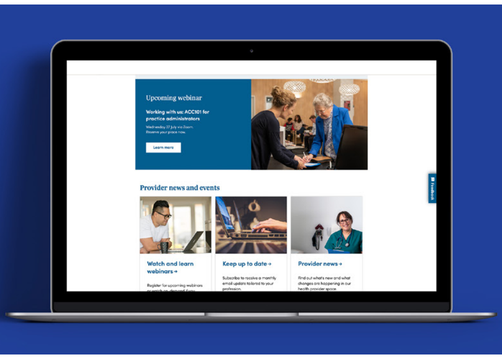
Authors: Stavric V et al.

Summary: This qualitative study used a person-based approach to assess the perspectives of 16 participants to inform the development of a self-guided web-based exercise intervention, Shoulder Pain Intervention delivered over the interNet (SPIN). Interpretive Descriptive methodology identified the participants' question as *Is it right for me?*, with three main sub-themes; *Should I use it?* (Will it work for me right now?), *Can I use it?* (Can I operate the intervention competently and confidently?), and *Will I use it?* (Will it be responsive to my unique needs, and keep me coming back?).

Comment: This research was led by one of my PhD students whose doctoral work is focused on the development of a self-guided digital intervention to manage shoulder pain for people with spinal cord injury. The protocol paper for the full programme of work is available here: https://pubmed.ncbi.nlm.nih.gov/31530616/. This qualitative study was carried out to ensure the intervention could be guided by the needs and concerns of people who would be using the intervention. The findings highlight the evaluative process people with spinal cord injury engage with in deciding whether or not to take up an intervention. Three questions guide their evaluation: 1) *Should I use it?* Is it credible? Is it safe? Is the intervention designed with people like me in mind? Is it likely to result in beneficial outcomes for me? 2) *Can I use it?* Am I capable of taking part? Will I be able to tailor it to make it work for me? Do I have the necessary resources and supports? 3) *Will I use it?* Am I likely to remain engaged? Will I experience a sense of progress that would support my ongoing engagement? Is the intervention likely to help me do the things I value? These findings provide a useful framework to underpin intervention development. I would also suggest that these findings have broader applicability for practice and are likely to be transferable to other interventions and settings. It is worth asking ourselves, to what extent can we be certain that our clients would positively assess existing rehabilitation interventions with these questions in mind?

Reference: Spinal Cord 2023;Jan 26 [Epub ahead of print]
Abstract

Getting started with ACC



We know there's a lot to take on board when you're new to working with ACC.

Even if you've been with us for a while, there's plenty of important information you need easy access to.

That's why we're taking steps to make life easier for you and the 30,000 other health providers across the motu who partner with us to improve the lives of our clients every day.

We've created a series of simple resources so you can feel confident helping your patients access the care and support available through ACC, regardless of how long you've been with us.

Through our discussions with a range of different providers, and research, the need for straightforward, concise and easy-to-find information was clear. It was also important our own people were there to tell you about it.

All you need to know about ACC

What we've developed are short introductory videos, a new and engaging webinar forum to answer your questions, and a series of handy quick guides to find out what you need to know – fast.

These are all hosted on our new Getting Started with ACC webpage and are also available on the refreshed health providers section of our website.

These resources explain the basics of ACC – how we work, how we're funded and what we cover.

They also give you practical knowledge, including how to register with us, lodge claims, invoice appropriately and use Read Codes.

You'll also learn about your roles and responsibilities as part of the ACC scheme so you know exactly what's expected of you and what you can expect from us.

Saving you time to focus on patients

"For our new providers in particular, being clear about how we work together from the get-go will set them up for a successful partnership with us," Dr Robson says.

The initial suite of resources will be part of an ongoing effort to develop useful education information for providers.

DR JOHN ROBSON Chief Clinical Officer and Head of Health Partnerships

"With our growing library of resources, we're looking forward to continuing to help providers gain a deeper and richer knowledge of ACC and our partnership," Dr Robson says.

"This will allow providers to spend less time understanding how to work with us and more time with their patients."

To find out more about how you or your colleagues can get started with ACC, visit acc.co.nz/getting-started.

ACC has developed a range of **resources** to help new and existing providers work successfully with us.

They cover the **basics of ACC** and practical knowledge on how to work with us.

It's important health providers **feel confident** in working with ACC.

This will give you **more time** to spend on achieving the best outcomes for your patients.

ACC
He Kaupare. He Manaaki.
He Whakaora.
prevention. care. recovery.

acc.co.nz/getting-started