

Mental Health a Fundamental Pillar for the Recovery from Complex Regional Pain Syndrome (CRPS) in a Proposed Clinical Conceptual Model

Dr. Tracey Pons

Registered Specialist Pain Physiotherapist, New Zealand (NZ)
Chair Physiotherapy NZ Mental Health Special Interest Group – member IOPTMH

Abstract

Mental health is suggested as a fundamental pillar in a conceptual clinical model for effective recovery from Complex Regional Pain Syndrome (CRPS). This first physiotherapy model is based on evidence from a multi-center, prospective, longitudinal study across a region.

Method: Physiotherapists accepting CRPS patients across the South Island were invited to participate and were given information about the project in person. Patients with a new diagnosis of CRPS (according to the Budapest criteria), and who presented for physiotherapy were invited to be prospectively interviewed following being given information about the study and providing their written consent. The physiotherapy clinical record would be accessed retrospectively to document the interventions applied. Ethical approval for this study was provided by the University of Otago Ethics committee (Reference number H13/103, and ethical approval was also granted from each individual South Island regional District Health Board. Three components were merged: a) significant Spearman correlations (significance $p < 0.05$), from a cohort of fifty-two female and 14 male participants with CRPS (age range 11-77 years; mean 46 years); associations of variance for continuous or categorical variables; and categories of physiotherapy treatment interventions of pain modulation or functional restoration with recovery; b) incorporating evidence from the literature; c) integrating the essence of previous medical models.

Results: Spearman correlation significant relationships of baseline measures found to be associated with a complete recovery were better mental health; higher score of personality extraversion; a lower score of personality neuroticism; better functional ability and quality of life; and non-Māori ethnicity. A full recovery was associated with a higher intensity of physiotherapy education (recorded in clinical notes as ‘education’ and calculated as a weekly average intensity for analysis) and concurrent medical prescription of anticonvulsant medication group. This novel proposed conceptual model for physiotherapy and recovery from CRPS has one key foundation pillar as mental health.

Conclusion: It is important that Physiotherapy, and where to next, involves the integration of mental health in all models for assessment or intervention for pain. Since this is the first conceptual model to be presented for CRPS, it remains to be tested with future research.

