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O0035

Modified interstitial lung disease (ILD) pulmonary rehabilitation (PR) programme: patients' perceptions



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Keywords: Interstitial lung disease; Pulmonary Rehabilitation

Purpose: Interstitial lung disease (ILD) refers to a group of fibrotic lung conditions that differ in terms of treatment, prognosis and association. There is no clear guidance for delivery of pulmonary rehabilitation (PR) to ILD patients, current practice is to extrapolate from the benefits of PR in COPD, despite differing pathophysiology. NICE quality statement (2015) supports PR for patients with idiopathic pulmonary fibrosis (IPF), the most common form of ILD. There remains a paucity of research into the delivery of the educational component of PR for ILD patients as well as exercise delivery. This research set out to explore ILD patients' perceptions of a modified ILD PR program to better guide the delivery of future ILD specific PR.

Methods: Seven participants were recruited to a 6-week PR program consisting of 60 minutes exercise (with the emphasis on strength training) & 30 minutes education tailored to suit an ILD cohort. Focus group interviews were used to collect qualitative data and were transcribed and analysed using an inductive approach utilising thematic analysis as a method.

Results: 7 patients completed the programme (5M:2F, mean age 73.4). Diagnosis included IPF (5), Hypersensitivity Pneumonitis (1) and Sarcoidosis (1). Three main themes were identified; Engagement with PR, Perceived benefit of PR and Important components of ILD specific PR. Increased knowledge relating to their condition and how to self manage symptoms as well as a desire for physical gains were dominant responses from participants.

Conclusion(s): Attending a modified ILD PR course improved participant perceptions of their ability to engage in exercise and activities of daily living, as well as their confidence in managing symptomatic presentations such as breathlessness. Participants placed great value on the education sessions involved in PR and found the ILD specific PR course empowered them to autonomously maintain their engagement with physical activity following completion of the course.

Facilitators to positive patient engagement and adherence to maintenance of activity after PR were identified through

patient development of self-efficacy skills attributed to the specific ILD education sessions and the individualised exercise plans given to each patient. Participants in general placed equal importance on the value of both the exercise and education components of an ILD specific PR course, supporting current PR guidelines that strongly advocate the addition of both components in all PR courses.

Implications: This study contributes to the understanding of the impact PR has on individual experiences of disease management and maintenance of physical activity in an ILD cohort. Although only small participant numbers were included in this research, it provides the foundation upon which to develop larger studies that can compare ILD patient perceptions of specific or generic PR courses to better establish the service needs of this group of patients. Despite a growing body of evidence demonstrating the positive impact of PR for ILD patients, this study is one of the first to explicitly demonstrate the perceived utility of PR and has generated some relevant practice points for consideration when enrolling ILD patients onto PR courses, be it generic or disease specific programmes.

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Detection of heat and cold pain thresholds: an intra and inter rater reliability study



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Keywords: Quantitative Sensory Testing; Reliability; Pain Mechanisms

Purpose: It is estimated that 28 million people experience long term pain in the UK, with this number predicted to increase. A mechanistic approach to assessing both acute and long-term pain may optimise outcomes through enabling personalised management. Quantitative sensory testing (QST) through a range of modalities (pressure, thermal, vibration, and temporal summation) has been used to characterise patient populations (e.g. whiplash and osteoarthritis) and predict outcomes. Whilst reliability studies have shown adequate to good reliability (intra and inter rater) of QST measures, few have evaluated both intra and inter-rater reliability and many are of poor methodological quality. The objective of this study was to establish intra (between day) and inter (within day) rater reliability of heat and cold pain thresholds.

Methods: A test-re-test study design of within day (inter-rater) and between day (intra-rater) reliability with two raters

was conducted in a University setting, with a convenience sample of healthy participants. Four measurements were taken over two days, at least 48 hours apart, using a TSA-II NeuroSensory Analyzer thermal stimulator (Medoc Ltd). A minimum two-hour interval between testing sessions on the same day was observed to allow for washout and to minimise learning effects. Raters, modality, site and laterality were randomised. Upper limb (extensor carpi radialis), lower limb (tibialis anterior) and spinal (lumbar erector spinae) sites were assessed. Intra-class correlation coefficient estimates (ICC 3,2), 95% confidence intervals and Bland Altman plots for limits of agreement for between and within day results were calculated. Ethical approval was obtained from the University of Birmingham Ethics Committee (ERN_17-0893).

Results: 17 participants were recruited (53% women, mean age (SD) 28.2 years (8.5)).

Heat pain thresholds: Intra-rater reliability for both raters was good to excellent for all sites (ICC range = 0.77–0.97). Inter-rater reliability was excellent for all sites (ICC range = 0.83–0.95).

Cold pain thresholds: Both intra-rater reliability (ICC range = 0.85–0.97) and inter-rater reliability (ICC range = 0.83–0.98) was excellent for all sites. Some participants reached the equipment safety limit of 0°. When data of 0° were excluded, the inter-rater reliability was good to excellent (ICC range = 0.79–0.97), but intra-rater reliability varied from adequate to excellent (ICC range = 0.55–0.93).

Conclusion(s): Both heat and cold pain thresholds were reliable measures for within and between day testing in an asymptomatic population. Inadequate statistical power could explain the reduced intra rater reliability when excluding safety limit data. Establishing intra and inter-rater reliability in symptomatic populations is now warranted.

Implications: Heat and cold pain thresholds are useful assessment tools in both research and clinical practice moving towards a more mechanistic approach for assessing pain, but reliability needs to be assessed across symptomatic populations in rigorous studies. The potential limitation of the thermal analyser safety limit of 0° requires evaluation for symptomatic participants.

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O0037

Living with frailty and falls: a qualitative study exploring the experiences of patients with end-stage renal disease receiving haemodialysis

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Keywords: Haemodialysis; Frailty; Falls

Purpose: Frailty develops earlier and advances at an accelerated rate in patients receiving haemodialysis. Outcomes for these patients are poor and include increased risk of falls and fracture. The aim of this study was to explore haemodialysis patients' experiences of living with frailty and falls. This information is crucial to enhancing patient safety and care, and to inform tailored interventions to improve outcomes.

Methods: A purposive sample of vulnerable or frail (Clinical Frailty Scale, CFS Score 4–9) adult haemodialysis patients who had experienced at least one fall within the last six months were recruited. In-depth, semi-structured qualitative interviews were digitally recorded, transcribed verbatim and analysed using a constant comparative approach.

Results: Ten participants with a mean age of 65 (±12) years, who had experienced 5 (±5) falls within the last 6 months, were interviewed.

Exhaustion and weakness were the most prevalent characteristics of frailty, which led to 'slowing down' and low levels of physical activity, worsened by hospital admissions and inactivity during haemodialysis. Unintentional weight loss was more complex. Some participants reported gaining weight due to fluid overload, whilst others reported weight

