

DETERMINING THE CLINICAL EFFECTIVENESS OF THE LUMBACURVE™ IN THE MANAGEMENT OF SIMPLE MECHANICAL LOW BACK PAIN

J Alexander, A Chohan, Prof J Selfe, Prof J Richards, and K May

Author affiliations: University of Central Lancashire, Preston, UK

Abstract

Background Low back pain (LBP) is widespread in all populations and is a health problem, which poses substantial challenges for clinical management. Individuals with LBP may reduce their symptoms by implementing self-managed at-home interventions. The theoretical design of the LumbaCurve™ promotes the principles of a passive gravity assisted traction (PGAT) stretch of the lumbar and sacral region in order to reduce LBP. The study aimed to assess the clinical effectiveness of the LumbaCurve™ in the management of LBP when compared to a control group of standardised care.

Methods Following a screening form using Red Flags and STarT Back tools, 60 individuals with LBP were recruited to the 4 week intervention. Eligible participants completed a pre-intervention questionnaire and were randomly allocated to either 'standardised care' or 'standardised care PLUS LumbaCurve™' group. Intervention material was trialled for 4 weeks consecutively, followed by a post-intervention questionnaire. Pre and post assessments applied the Roland and Morris Disability Questionnaire (RMDQ), Patient Reported Outcome Measures (PROMS)

Results Interim results suggested RMDQ values demonstrate a trend toward the classification of 'definite improvement' following standardised care plus LumbaCurve™ intervention. When comparing pre / post outcomes alone for the intervention of standardised care plus LumbaCurve™, significant reductions in RMDQ results occurred ($p=0.14$). PROMS results reported a significant decrease ($p=0.15$) in average pain rating when comparing interventions

Conclusion Initial findings report that through a four week intervention programme, significant improvements in patient reported back pain levels are demonstrated following standardised care plus LumbaCurve™ intervention.

This abstract has not been previously published in whole or substantial part and has not previously been presented at a national meeting

Conflicts of interest: No conflicts or interest

Source of funding: SPARK Impact; manager of The North West Fund for Biomedical