

ORIGINAL RESEARCH



Communication Skills Training for Practitioners to Increase Patient Adherence to Home-Based Rehabilitation for Chronic Low Back Pain: Results of a Cluster Randomized Controlled Trial

Chris Lonsdale, PhD,^a Amanda M. Hall, PhD,^b Aileen Murray, MSc,^c
Geoffrey C. Williams, PhD,^d Suzanne M. McDonough, PhD,^e Nikos Ntoumanis, PhD,^f
Katherine Owen, PhD,^a Ralf Schwarzer, PhD,^a Phillip Parker, PhD,^a Gregory S. Kolt, PhD,^g
Deirdre A. Hurley, PhD^c

From the ^aAustralian Catholic University, Strathfield, New South Wales, Australia; ^bOxford University, Oxford, United Kingdom; ^cUniversity College Dublin, Belfield, Dublin 4, Ireland; ^dUniversity of Rochester, Rochester, New York; ^eUlster University, Newtownabbey, United Kingdom; ^fCurtin University, Bentley, Western Australia, Australia; and ^gWestern Sydney University, Sydney, New South Wales, Australia.

Abstract

Objective: To assess the effect of an intervention designed to enhance physiotherapists' communication skills on patients' adherence to recommendations regarding home-based rehabilitation for chronic low back pain.

Design: Cluster randomized controlled trial.

Setting: Publicly funded physiotherapy clinics.

Participants: A sample (N=308) of physiotherapists (n=53) and patients with chronic low back pain (n=255; 54% female patients; mean age, 45.3y).

Interventions: Patients received publicly funded individual physiotherapy care. In the control arm, care was delivered by a physiotherapist who had completed a 1-hour workshop on evidence-based chronic low back pain management. Patients in the experimental arm received care from physiotherapists who had also completed 8 hours of communication skills training.

Main Outcome Measures: (1) Patient-reported adherence to their physiotherapists' recommendations regarding home-based rehabilitation measured at 1, 4, 12, and 24 weeks after the initial treatment session. (2) Pain and pain-related function measured at baseline and at 4, 12, and 24 weeks.

Results: A linear mixed model analysis revealed that the experimental arm patients' ratings of adherence were higher than those of controls (overall mean difference, .41; 95% confidence interval, .10–.72; $d=.28$; $P=.01$). Moderation analyses revealed that men, regardless of the intervention, showed improvements in pain-related function over time. Only women in the experimental arm showed functional improvements; female controls showed little change in function over time. The Communication Style and Exercise Compliance in Physiotherapy intervention did not influence patients' pain, regardless of their sex.

Conclusions: Communication skills training for physiotherapists had short-term positive effects on patient adherence. This training may provide a motivational basis for behavior change and could be a useful component in complex interventions to promote adherence. Communication skills training may also improve some clinical outcomes for women, but not for men.

Archives of Physical Medicine and Rehabilitation 2017;98:1732-43

Crown Copyright © 2017 Published by Elsevier Inc. on behalf of the American Congress of Rehabilitation Medicine

Presented to the Annual General Meeting of the Society for Back Pain Research, November 14–15, 2013, London, UK.

Supported by the Health Research Board of the Republic of Ireland (grant no. HRA_POR/2010/102).

Clinical Trial Registration No.: ISRCTN63723433.

Disclosures: Geoffrey C. Williams has consulted with Pfizer and was a medical director with Self-Determined Health, Florida (outside the research reported in this article). The other authors have nothing to disclose.

Patient adherence to interventions based on self-management principles is often poor.¹ For example, patients with chronic musculoskeletal conditions often do not complete their home-based exercise programs as recommended by their health care practitioners.^{2,3} Poor adherence to treatment recommendations is problematic for both clinicians and patients, because it can limit the potential for positive treatment outcomes.^{4,5} Despite acknowledgment that interventions targeting patient behavior should be grounded in relevant behavior change theory,⁶ there is limited evidence regarding the effect of theory-based interventions to promote adherence in populations with chronic pain.⁷⁻⁹

According to self-determination theory,¹⁰ people have psychological needs for autonomy (feeling free to engage in an activity), competence (feeling effective and capable), and relatedness (feeling connected to and cared for by others). When health care practitioners support their patients' psychological needs, patients are more likely to be autonomously motivated (ie, empowered), which results in more enduring behavior change.¹¹ In contrast, a controlling health care climate involves disregarding patients' views, pressuring patients, and making decisions on patients' behalf without consultation, leading to more controlled motivation and poorer long-term adherence. Unfortunately, health care practitioners often adopt the latter model of patient care.¹²⁻¹⁴

We designed a self-determination theory-based communication skills training intervention, called Communication Style and Exercise Compliance in Physiotherapy (CONNECT), for physiotherapists working with people seeking treatment for chronic low back pain. Communication skills training can increase patient adherence across a range of conditions,¹⁵ but there is limited evidence regarding its effect on adherence to chronic pain self-management¹⁴ or clinical outcomes.¹⁶

Aims

The aim of this cluster randomized controlled trial was to assess the effect of an intervention designed to enhance physiotherapists' need-supportive communication skills on patients' adherence to recommendations regarding home-based rehabilitation for chronic low back pain. We also sought to examine effects on hypothesized determinants (eg, motivation) and clinical outcomes (eg, pain) of increased adherence. Finally, in response to increasing calls for a gendered approach to health research,¹⁷⁻¹⁹ we explored the possibility that CONNECT may have differential effects on pain and function for male and female patients.

Hypotheses

Compared with patients in the wait-list control arm, patients in the experimental arm will show

1. greater self-rated adherence to physiotherapists' recommendations regarding home-based rehabilitation, greater increases in physical activity, and greater adherence during physiotherapy sessions;

2. greater decreases in pain, along with greater increases in function, well-being, and perceived global improvement after treatment; and
3. greater increases in perceived competence and autonomous motivation, as well as greater decreases in fear-avoidance beliefs, controlled motivation, and amotivation (ie, lack of motivation).

We did not formulate *a priori* hypotheses for our exploratory sex moderation analyses.

Methods

Design

This study was a patient and assessor-blinded cluster randomized controlled trial (Clinical Trial Registration No.: ISRCTN63723433). A methodological description has been published previously.²⁰

Participant recruitment, consent, and allocation

Centers

Managers at 13 publicly funded outpatient clinics providing general physiotherapy services in Dublin, Ireland, were invited to participate. These clinics included all 9 community care clinics and 4 of the 6 outpatient hospital clinics in the region. These 4 hospitals were purposively sampled to provide a cross section of socioeconomic levels and geographical locations. Research ethics committees responsible for each site granted approval, and the study conformed to the Declaration of Helsinki. Centers were assigned to the experimental or control arm (1:1) after their physiotherapists agreed to participate in the study. A person blinded to the purposes of the study used a computerized random number generator algorithm to assign centers.

Patients

Because randomization was by center, all participants in a given center belonged to the experimental arm or the control arm. We contacted each patient referred by a medical practitioner for physiotherapy for chronic low back pain to 1 of the 12 centers. Patients who met the inclusion criteria (table 1) and provided informed consent were invited to complete baseline assessment.

Interventions

Training for physiotherapists

In both arms, physiotherapists participated in a 1-hour refresher workshop on evidence-based physiotherapy care for chronic low back pain.^{21,22} In addition, physiotherapists in the experimental arm completed 8 hours of communication skills training, details of which have been published previously.^{20,23}

Treatment for patients

Patients in both trial arms received publicly funded physiotherapy care. We placed no restrictions on the number of sessions each patient could receive or the type of treatment the physiotherapist administered. As such, all patients received usual care, but in the experimental arm this care was delivered by a physiotherapist who had completed CONNECT training.

List of abbreviations:

CONNECT Communication Style and Exercise Compliance in Physiotherapy

Download English Version:

<https://daneshyari.com/en/article/5677404>

Download Persian Version:

<https://daneshyari.com/article/5677404>

[Daneshyari.com](https://daneshyari.com)