



ISCRR

Institute for Safety,
Compensation and
Recovery Research

A joint initiative of WorkSafe Victoria, the TAC and Monash University



Self-Management for Return to Work

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Closing the Loop Adelaide July 2012

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Funding part



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Research partners:

Other contributors:



Investigators

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- Dr Venerina Johnston. Lecturer, Physiotherapy, University of Queensland
- Prof Jenny Strong, Professor of Occupational therapy, University of Queensland
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- Prof Malcolm Battersby, Professor of Psychiatry, Flinders University

Introduction

Arthritis & musculoskeletal disorders (MSD) are responsible for the 3rd largest percentage of health expenditure and were declared a „*National Health Priority Area*“ in 2002 in Australia¹

MSD are common and costly illnesses for workers compensation (WC) systems². In 2009-10(p)

- over 85% of „serious WC“ claims are due to an injury or MSD, with over 50% due to a sprain/strain of joint/muscle or fracture
- 10.8 serious claims (injury or MSD) per 1000 employees (1.9 other causes)
- 6.5 serious claims (injury or MSD) per million hours worked (1.1 other causes)
- sprains, strains & MSD; 4.5 weeks median time lost & \$7,400 median payment

Introduction

- Strong evidence-base for early RTW as part of the management of these conditions
- However, those involved in workers compensation systems can experience a „sense of powerlessness engendered by being caught up in the system“, lack of control over the compensation process, and poor health and vocational outcomes³

Self Management

- an approach increasingly used in chronic illness care, to improve self-efficacy and wellness behaviours⁴
- aim is that participants learn and practice new behaviours so they develop generic skills and adopt new perspectives they can be applied when problems arise
- i.e., develop the skills necessary to conduct active and emotionally satisfying lives while living with their condition/make informed choices and carry them out⁵
- based on their perceptions of their problems, and their readiness to change and self-efficacy

Self-management -definitions

- What is self-management? Multiple definitions viz:
 - Self-care = medical self-management
 - Lifestyle risk factors
 - Adherence/compliance

National Consensus: Definition of self-management support

- Self-management support is what health professionals, carers and the health system do to assist the person
 - to manage their disease or condition,
 - in order to promote health and prevent illness,
 - detect, treat and manage early signs of disease,
 - and minimise the disabling impact of existing conditions and complications”

Definition of self-management

- Having **knowledge** of the condition and/or its management
- Adopting a **self-management care plan** agreed and negotiated in partnership with health professionals, significant others and/or carers and other supporters
- **Actively sharing in decision-making** with health professionals, significant others and/or carers and other supporters
- **Monitoring and managing** signs and symptoms of the condition

Defⁿ of Self-management

- Managing the **impact** of the condition on physical, emotional, occupational and social functioning
- Adopting **lifestyles** that address risk factors and promote health by focusing on prevention and early intervention
- Having **access** to, and confidence in the ability to use support services

Self-Management

- 5 KEY COMPONENTS of the SM approach
 - Identifying problems
 - Brainstorming and problem solving
 - Positive thinking
 - Decision-making and goal setting
 - Taking action
- 5 CORE SKILLS⁶
 - Problem solving
 - Decision-making
 - Finding and using resources
 - Forming partnerships
 - Taking action

Self Management

- Evidence that self management programs can increase self efficacy, reduce pain, fatigue & anxiety, and reduce emergency service visits and hospitalisations⁷⁻¹¹

Kate Lorig; Stanford self-management tools/programs¹²⁻¹³

- Australia since early 1990s (Arthritis Foundations)
- however new to the WDP arena
- unaware of any study that has assessed the impact of self-management on vocational outcomes

Flinders

- Generic: individual
- Taught by accredited health professionals to health professionals
- Health professional - patient partnership with patient sharing decisions and taking responsibility
- Assessment and care planning, behavioural change (goal setting)
- Based on cognitive and behavioural principles and techniques

Stanford

- Generic: group
- Taught by health professionals and peers to peers
- Independent of health professional -patient relationship
- Generic skills – goal setting, problem solving, symptom management,
- Based on cognitive and behavioural principles and techniques

Research Aims

- develop a tailored intervention that improves the self-management skills of those with a work disability; „self-management for return to work“ (SMRTW)
- assess the effectiveness of the intervention in terms of vocational rehabilitation and other outcomes
- assess the cost effectiveness of the intervention compared with usual vocational rehabilitation care
- assess the acceptability of the intervention to different stakeholders

Study Origins and ethics approvals

- Australian Research Council (ARC) Linkage Grant LP0989499
 - support research that is collaborative between higher education researchers and other parts of the national innovation system. A Partner Organisation from outside the higher education sector must be involved must make a significant contribution in cash and/or in kind to the project. ... opportunities for researchers to engage in industry-oriented research.
http://www.arc.gov.au/ncgp/lp/lp_default.htm
- Human Research Ethics Committee (HREC) of The University of Queensland - May 2009 #2009000579; and, Monash University Human Research Ethics Committee (MUHREC) - August 2011 #CF11/2335 - 2011001328
- Recruitment process approved by WC authority
- Trials Register: Australian and New Zealand Clinical Trials Registry
ACTRN12609000843257

Research Team



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- Occupational health physician
 - Physiotherapists
 - Occupational therapist
 - Health economist
 - Psychiatrist
 - Project manager (experimental neuropsychology)

Team members have experience and expertise in occupational health, policy making in public and private sectors in occupational health, vocational rehabilitation, rehabilitating people with MSDs and chronic pain, and in conducting clinical trials and trials of self-management interventions.

Developing and evaluating the intervention

DEVELOPERS: physiotherapist
with experience in vocational
rehabilitation (WDP graduate)



experienced
self-management trainer

+

occupational therapist with
experience in rehabilitation of
people with chronic pain

reviewed by remaining
members of the
research team



focus groups of vocational
rehabilitation clients, with a
chronic MSD

[did the content
address their needs?]

voc. rehab. professionals
[did the content cover
important themes in
RTW for those with a
chronic MSD?]

trained CDSMP facilitators [is the
content/language in keeping with the
CDSMP; what to add/exclude?]



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Intervention; Stanford Course

6 sessions, 2-2½ hours, community setting,

Leaders two for each course; 1 occ rehab consultant. and 1 from Arthritis Vict - Leader training 3.5 days

Each of the 6 sessions teaches goal setting, action planning and problem solving

Other sessions teach managing emotions, pain, fatigue, exercise, use of medications, communication, and nutrition

Additional modules

Module 7: *Navigating the system*

- understand the system, services available, those involved/roles eg Worksafe website
- identify & „problem solve“ system-related issues

Module 8: *Managing a return to work*

- understand the process, implications, facilitators, barriers, Centre link website, counselling, disability services, legal issues
 - brainstorm RTW issues, plan for the future
-
- Follow up – encouraged to exchange details to be in contact after the course

Methodology

Quantitative

1. Effectiveness

RCT: „usual vocational rehabilitation care“ vs. „usual vocational rehabilitation care + SMRTW intervention“

2. Efficiency/economic

Cost-effectiveness & cost analysis

Qualitative

3. Acceptability

Focus groups of stakeholders

Study design developed in collaboration with industry partner

Selection Criteria

Inclusion Criteria

- compensated MSD, diagnosed by medical practitioner, 3mths-3yrs duration
- referred to an occupational/vocational rehabilitation provider
- working for pay at injury/onset of condition
- payer agrees to their participation
- adequate language & literacy skills

Exclusion Criteria

- signs & symptoms suggestive of a red flag condition e.g. tumor, systemic illness, inflammatory disease
- primary condition is psychological/psychiatric or neurological (ABI, SCI)
 - co-morbid psychiatric conditions not excluded

Recruitment

QUANTITATIVE

- 366 participants (80% power)
- „potentially“ eligible clients identified by partner voc. rehab. providers and centrally by worker compensation authority; contacted by mail with letter from WC authority & research team to determine their interest, and subsequently by trained interviewer to determine their eligibility and to commence the informed consent process
- initial data collection; pre-intervention questionnaire
- randomly allocated by an external organisation to usual care or intervention group

Outcome Measures

PRIMARY

- READINESS TO RETURN TO WORK SCALE¹⁴
 - 6 dimensions; 4 non-working & 2 working
 - classified as „ready to RTW (RRTW) if „Prepared for action-self evaluative“, „Uncertain maintenance“ or „Proactive maintenance“

SECONDARY

- RTW
- general health status: SF-12v2¹⁵
- impact of attending health education/SMRTW intervention
Health Education Impact Questionnaire (heiQ)¹⁶
 - proximal outcomes of patient education programs for chronic conditions e.g. engagement in life, skills & techniques acquisition, insight, emotional well-being
- pain (VAS)

Effectiveness

- „an intention to treat“ and „per protocol“ basis
 - classified as having received the intervention if attended 5/8 sessions & at least 1 new module session
- multivariate regression: continuous variables; pain, health status
 - multi-level modelling (within participant differences over time & repeated measures design)

Data Collection

- Questionnaire: pre-intervention, immediately post, 6 & 12mths post (trained staff, telephone interviews)
 - socio-demographic, pain, SF-12, use of vocational rehabilitation services, health services, medication use, *Readiness to Return to Work Scale*, their expectation of their RTW, RTW outcomes (hours worked), subsection from *WHO's Health and Work Performance Questionnaire* estimating presenteeism, *Health Education Impact Questionnaire* (heiQ)
- Worker Compensation Authority
 - pre-injury work hours, average wage, occupation & industry, injury type, services provided and unit costs, income benefits paid

Economic Evaluation

DEPENDS ON THE PERSPECTIVE OF THE ANALYSIS

- IDEALLY; economic evaluations adopt society's perspective which means that ALL costs (& ALL Benefits) would be included i.e.,
 - costs to funders („usual care“ i.e., weekly income benefits + voc. rehab + health care services provided during their rehabilitation
 - cost of the SMRTW intervention*
 - costs to governments
 - costs to the injured worker (e.g., travel & time costs)
 - costs to injured worker's family (e.g., time off work)
- Workers Compensation Authority
 - as likely to be the organisation that would fund this service/intervention in the future if it was found to be effective i.e., improvements in RRTW, RTW

Cost Analysis

THIS STUDY: not attempting include & value ALL benefits that the SMRTW intervention may produce

SO UNDERESTIMATING THE VALUE OF THE INTERVENTION

- Only using an estimate of „extra days worked following RTW“ as the benefit of the SMRTW Intervention (hypothesising that those who receive the intervention will on average, RTW earlier than the usual care group); Will value the days worked using average wage rates
- And; will use an estimate of „health-related productivity loss“ or „presenteeism“ (WHO“s *HPQ*¹⁸) to adjust the estimated value of the benefit of the intervention, to account for any self-reported reduced productivity

Acceptability

- focus group sessions to explore the perceptions, experiences & understandings of stakeholders regarding the impact & acceptability of SMRTW intervention
- injured workers, rehabilitation provider partners, insurers, and regulators/policy makers

To date; undertaken with 1st group participants

- useful feedback on strengths and weakness of the intervention


Project Implementation

- Grant awarded 2008
- Ethics approval mid 2009
- 1st group Feb-March 2012





Project Implementation

- issues with accessing an eligible population
- investigated relocating to „capture“ this population but still access issues
- „self-insurers“; other priorities and would have required recruitment through legal avenues
- lead CI; new institution partially funded by a state worker compensation authority 
- regulator facilitated access to, and coordinated the involvement of rehabilitation provider organisations (& provided extra funding)
- rehabilitation service providers; competitors, commercial entities, own interests & motivations for being involved

Progress

- n=340 in our call list database;
- 118 into groups
- 28 have since withdrawn
- leaving **n=89 in trial; 39 intervention, 50 usual care.**
- Of the 39 Group 1 = 8 : Group 2 =5, Group 3 = 9+
- approx 15 consented and awaiting group allocation.

Preliminary participant feedback

- regular attendees (5) of the first program found that the training „made a difference“ in terms of:
- feeling less isolated and confirming that their feelings were „normal“;
- exposing them to different approaches / perspectives and ways of handling things that could improve their situations;
- experience was cathartic (sharing experiences and emotions);

Feedback

- changed outlook (more positive);
- improved management of their own situation, i.e. accepting of the system and attempting to influence aspects of their recovery that they do have control over;
- fewer doubts about managing their own rehabilitation (using the resources provided and seeking help when they need it).

Participant comments **health care providers / organisations**

- they were „*not included in the conversation with their health care provider*“, and
- health care providers „*can't understand and relate to their situation*“, and
- they „*don't care enough*“.

Participant quotes

- *“before the course I was a passenger in the bus with very little say in the destination”, and that the course “helped to confirm what I already knew and gave me more confidence in managing my own rehabilitation”.*
- “I don’t understand why this [program] cannot be made mandatory to attend for all of those on workers’ compensation if they are still injured and unable to work 6 months after injury”.
- “program IS different to the approach taken by standard Occ Rehab – where their primary interest and concern is seeing a RTW. This program is more about a „Return to Life“ with the potential for [a more indirect outcome] a successful RTW.”

Translation

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2. Ellis, N. *et al* 2011 „Disempowerment of workers in vocational rehabilitation: would self-management work?“ *Journal of Health Safety and Environment* 27(3) 171-184
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4. Conferences

Other initiatives:

- developing a resource for those preparing for RTW after injury using insights and advice from those who received the SMRTW intervention
- promoting „self-management“ as an optional approach for clinicians, for some patients/clients

Reflections

- Transdisciplinary approach
 - development and evaluation of the intervention
 - development of the methodology & implementation of the study
 - perspectives that could have been involved?
 - Finding the right industry partners -
- Recruitment issues – are we targeting the right workers and do we have the most appropriate inclusion criteria
- Should the occ rehab providers be group leaders?

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Thank you
