Work Participation and Musculoskeletal Pain

The influence of ‘significant others’ and implications for vocational rehabilitation

Dr Serena McCluskey
Why do some people become work-disabled?

- They do not have a more serious health condition or more severe injury
  - So, it’s not about what has happened to them; rather it’s about why they don’t recover
- They face obstacles to recovery and participation
The obstacles model
- obstacles to work participation

→ biopsychosocial approach
Psychosocial Flags Framework

**Person** - psychosocial factors associated with unfavourable clinical outcomes and the transition to persistent pain and disability

**Workplace** - stem largely from perceptions about the relationship between work and health, and are associated with reduced ability to work and prolonged absence

**Context** - in which the person functions; includes relevant people, systems and policies. These may operate at a societal level, or in the workplace. They are especially important since they may help or hinder the recovery process.
The influence of ‘significant others’

• Significant others (spouses/partners/close family members) have been shown to have an important influence on an individual’s pain behaviour and disability.

• Largely based on operant (reinforcement), cognitive-behavioural (thoughts about patient behaviour), communal coping (response to patient catastrophizing) and empathy (own experience influencing response) models of pain.
Family and work participation

- Department for Work and Pensions, UK (2011) – “family has an important role to play in facilitating RTW”

- Relationships with ‘significant others’ and ‘family life’ are highlighted in review studies of work participation

- HSE, UK (2013) ‘A spouse or partner acting as a proxy respondent is associated with a 26% reduction in the likelihood that an individual is recorded as suffering from work related ill-health. This increases to 53% where the proxy respondent is not a spouse or partner”
Gaps in the existing research

- Significant others are rarely the main/sole focus of research
- Data is rarely collected from significant others themselves
- The influence of significant others on work participation has not been directly examined
- The focus is largely on those who are unable to work due to musculoskeletal pain
Studies

- Chronic musculoskeletal pain (CMP) patients and their significant others in the UK (n=28) & the Netherlands (n=103):
  1. Condition Management Programme (all work-disabled);
  2. Hospital-based pain clinic (half work-disabled, half still at work)
  3. Media advertised study (all at work)

- Data from studies 2 and 3 were assimilated to explore the relevant factors around continued work participation with CMP
Studies 1 and 2

- UK - patients and their significant others were interviewed separately in their own homes, using an interview schedule derived from the chronic pain version of the Illness Perceptions Questionnaire (Revised) (IPQ-R) (Moss-Morris et al, 2002)
Significant other questions

- What do you think was the cause of your relative’s problem?
- What do you expect is going to happen?
- How effective is their treatment plan?
- When do you think they’ll get back to work?
- What has been the effect on you?
- What do you think should be done to help?
Results:

- Template analysis was used to map the qualitative data onto the IPQ-R constructs. Those found most relevant to work participation came under the constructs of:

1. Beliefs about causality; 2. Consequences of illness; 3. Treatment expectations
Results (work-disabled)
‘Beliefs about Causality’

“I know for a fact it was work because she complained doing it”

“It’s probably something that he carried in work that hurt his back”

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Results (working): ‘Beliefs about Causality’

• “He doesn’t not do anything because he’s got pain”

• “Although it makes working hard, he goes to work because he just won’t give in to it”
Results (work-disabled): ‘Consequences of illness’

“He can’t work because he’s got so much back pain”

“And, as I say to him, who’s going to hire you? With a backache, you know……And who’s gonna let him lie down when he’s working in the factory, no-one are they?”
Results (working):

‘Consequences of illness’

• “In terms of what does it impact on, well it doesn’t impact on anything, he doesn’t not do anything because he’s got pain”.

• “I think his mental attitude is probably the reason he works full-time”.
Results (work-disabled): ‘Treatment Expectations’

“All I know is she’d like a cure to be able to get back out there and get back to work”

“She wasn’t happy with the results….there is something else underlying and we are waiting to see”
Results (working):

‘Treatment expectations’

- “Pain management is our preferred option and she can manage to work”
- “It’s accepting that they can’t actually do anything more and you just have to live with it”
Summary of findings – work-disabled

• Significant others shared and further reinforced unhelpful beliefs
• Significant others more resigned to permanence and negative inevitable consequences
• Significant others more sceptical about the availability of suitable work and sympathy from employers
• Significant others expected a cure and for their relatives to be pain-free in order to return to work
Summary of findings: working

- Significant others focused on what their relative could still do
- Significant others did not ‘blame’ work for the cause of the condition
- Significant others were supportive of their relative’s efforts in continuing to participate in normal activities, including work
- Significant others did not expect the back pain to be cured, but were positive about effective pain management
- Significant others had a greater degree of acceptance
Overall Summary

- Significant others have similar and in some cases, stronger beliefs than patients about treatment for persistent back pain and work participation (helpful and unhelpful!)

- Significant others could be valuable resource

- Wider social circumstances need to be acknowledged as obstacles or facilitators to work participation

- Focusing on the individual as the sole target for intervention may not always be appropriate/effective
Family support in maintaining work participation for those with chronic musculoskeletal pain

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Method

- Mixed-methods design: questionnaire data collected in Netherlands (n=103); interviews conducted in the UK based on the IPQ-R (n=10).

- Pain self-efficacy, perceived significant other responses to the workers’ pain, pain catastrophizing, and significant others’ roles in helping workers with CMP remain at work were explored.
### Quantitative results – The Netherlands

<table>
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<tr>
<th>Variables</th>
<th>Range</th>
<th>Workers</th>
<th>Sig others</th>
<th>P value</th>
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<td>Pain self-efficacy beliefs PSEQ a, mean (sd)</td>
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<td>45.3 (9.6)</td>
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<td>PCS b, mean (sd)</td>
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<td>1 (0.3-1.7)</td>
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<td>0.50*</td>
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Qualitative results:

Pain self-efficacy – ‘Illness identity’

‘Consequences of illness’

“I do try and manage my pain because I know it’s down to me. My capability is still there, just on a different level.....I refuse to go into a wheelchair”

[Worker]

“It’s not that much of an issue. I think she manages herself remarkably well and does what she can”

[Significant other]
“I think she’s more optimistic than me….to be honest, but we don’t really talk about it. I don’t know the full extent of it and I’m not sure I want to, out of trepidation. It all comes down to this fear factor, the anxiety of that and not knowing what the future holds”

[Significant other]

“I was concerned, I thought where do we go from here? Does he end up in a wheelchair? Does that mean he will get to a stage where he can’t walk? I do wonder where it will end up”

[Significant other]
Significant other responses: 
UK & Netherlands - Workers

“He takes me shopping, he drives for me”
“She’ll do all the gardening now”
“We walk together every morning at 5.45am and that helps me more than anything”
“It’s a big help having her there”
“She’s very sympathetic”
[Workers]
Significant other responses: UK & Netherlands – Significant others

- ‘Connectivity’ – encouraging communication
- ‘Activity’ – encouragement to keep active
- ‘Positivity’ – encouraging a positive outlook
Significant other responses: ‘Connectivity’

- “Make sure that I am always open to discussion”
- “It is important to let them determine when to talk about the pain”
- “Take the pain seriously, be patient, and avoid patronizing”
- “Always have a listening ear and sympathize”
- “Try to show understanding as much as possible…they might get grumpy because they are so tired from working and being in pain, but you have to be understanding”
Significant other responses: ‘Activity’

- “Ensure that they remain active despite the pain”
- “I tell him to continue with his activities and do not give in to the pain quickly”
- “Try to keep doing the things that are important and use your energy for that”
- “Just continue, the pain is there whether you work or not”
- “If you’re at work then you have no time to brood”
- “Don’t lie down, exercise and carry on as normal”.

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Significant other responses:

‘Positivity’

- “Don’t be a whiner”
- “Try to enjoy the things that you can and emphasise these. Go out to do fun things to keep you socially involved”
- “I always say there are worse things in life”
- “Try and be as positive as much as you can, don’t be miserable about it”
- “Do not resign yourself to a situation…be hopeful that it will improve”
- “Someone has to remain positive…I think positivity breeds positivity”
• Novel insights about the positive and supportive influence of significant others

• Significant others and workers beliefs are closely aligned

• Widely measured pain constructs have been further illuminated

• Pain self-efficacy and pain catastrophizing could be addressed in significant others to improve pain outcomes
Conclusions

• Interpersonal processes involved in chronic pain are important yet complex

• Relationship quality, socio-demographic characteristics and significant other health also important factors

• Adding to the under-researched ‘social’ component of the ‘biopsychosocial’ model of chronic pain.

• Significant others may be usefully involved in pain management and/or vocational rehabilitation
What next?

- 3 evidence-informed leaflets
  - workplace
  - worker
  - healthcare
- Evidence-informed
- Practical advice on return to work processes
- Facilitate communication and understanding
- Synchronous distribution
- Free PDFs

[Image: www.tsoshop.co.uk/evidence-based]
Acknowledgements/references

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