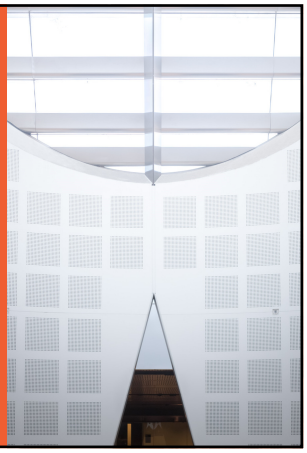
Psychology of pain and its management in the general population and in patients with End Stage Kidney Disease



Presented by
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Summary

- Pain is primarily a warning signal and useful
- But pain can also cause major suffering and disability
- Especially when it persists (chronic pain)
- Once pain becomes chronic, the only realistic option is to limit its impact (bothersomeness)
- Just as required for other chronic diseases
- The question is: How?
- None of our treatments are very effective (by themselves)
- The reality is that self-management must be our primary goal
- Our treatments can support that goal, but we need to recognize the primacy of self-management

Pain in ESRD: How common?

Patient Preference and Adherence Dovepress
REVIEW

Prevalence and severity of pain in adult end-stage renal disease patients on chronic intermittent hemodialysis: a systematic review

This article was published in the following Dove Press journal:
Patient Preference and Adherence
23 June 2016

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Objectives: Understanding the epidemiology of pain in patients on hemodialysis (HD) is crucial for further improvement in managing pain. The aim of this study was to systematically review available evidence on the prevalence and severity of pain in adult end-stage renal disease patients on chronic intermittent HD.
Materials and methods: We carried out a systematic review of the literature and developed a comprehensive search strategy based on search terms on pain and HD. We searched the databases MEDLINE, Scopus, PsycINFO, and CINAHL from the earliest date of each database to July 24, 2014. Manuscripts in all languages were taken into consideration. Two authors performed each step independently, and all disagreements were resolved after discussion with the third author. The quality of studies was estimated using the STROBE checklist and Cochrane risk-of-bias tool.

Brkvoc et al (2016)

92% had chronic pain

Results: We included 52 studies with 6,917 participants. The prevalence of acute and chronic pain in HD patients was up to 82% and 92%, respectively. A considerable number of patients suffered from severe pain. Various locations and causes of pain were described, with most of the studies reporting pain in general, pain related to arteriovenous access, headache, and musculoskeletal pain.

END STAGE RENAL DISEASE AND THE DISCONTINUATION OF DIALYSIS

Dr. Nicki Apostle
December 8, 2014

END STAGE RENAL DISEASE AND THE DISCONTINUATION OF DIALYSIS
Dr. Nicki Apostle, December 8, 2014

Pain:

- One of the most common symptoms in pts with ESRD yet under-recognized and undertreated
- At least 50% of HD pts report pain and 82% of these report pain of moderate to severe intensity
- Dialysis Outcomes and Practice Patterns Study 74% pts reported moderate to severe pain however NO analgesic prescription
- Cohort of Canadian HD pts 75% were found to have a negative Pain Management Index
- Impacts overall QOL, increases use health care system, impairs interpersonal relationships, limits function, increases rates depression, anxiety, insomnia, and increases consideration of discontinuing dialysis

END STAGE RENAL DISEASE AND THE DISCONTINUATION OF DIALYSIS
Dr. Nicki Apostle, December 8, 2014

Symptom Burden in ESRD:

- Fatigue 12-97%
- Pain 8-82%%
- Pruritus 10-77%
- Dry skin 72%
- Insomnia 20-83%
- Nausea 15-48%
- Anxiety 12-52%
- Depression 5-58%
- Anorexia 25-61%
- Constipation 8-57%
- Muscle cramps 28-60%
- Dyspnea 11-55%
- Headache 18-71%
- Restless legs 8-52%
- QOL 35% lower than age matched healthy population

If one or two don't work, try more?

You gotta be kidding – your back *still* hurts??

If we could just relieve the pain …..

N ENGL J MED 373;22 NEJM.ORG NOVEMBER 26, 2015

PERSPECTIVE INTENSITY OF CHRONIC PAIN

Intensity of Chronic Pain — The Wrong Metric?

Jane C. Ballantyne, M.D., and Mark D. Sullivan, M.D., Ph.D.

- Risks in chasing pain relief as primary goal
- Also 'opportunity costs' (reinforcing passivity while waiting for relief)

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Current guidelines for chronic pain generally

Practice Guidelines for Chronic Pain Management
An Updated Report by the American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine. Anesthesiology 2010; 112:810 –33.

The purposes of these guidelines are to:
(1) Optimize pain control ….a pain-free state may not be attainable;
(2) Enhance functional abilities, physical & psychological wellbeing;
(3) Enhance the quality of life of patients; and
(4) Minimize adverse outcomes.

These form the basic goals of chronic pain management generally, **but how might we achieve them?**

Increasingly acknowledged that person in pain has to play a role

REPORT BRIEF JUNE 2011

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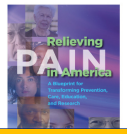
For more information visit www.iom.edu/relievingpain

Relieving Pain in America
A Blueprint for Transforming Prevention, Care, Education, and Research



Ongoing **self-management** by those with chronic pain, supported by their health care providers, ….. best option.

1

Recent review of long-term outcomes from multi-disciplinary pain management in patients with clbp

thebmj
BMJ 2015;350:h444 doi: 10.1136/bmj.h444 (Published 18 February 2015) Page 1 of 11

RESEARCH

Multidisciplinary biopsychosocial rehabilitation for chronic low back pain: Cochrane systematic review and meta-analysis

OPEN ACCESS

Steven J Kamper *senior research fellow*[1 2], A T Apeldoorn *research fellow*[2], A Chiarotto *research assistant*[2], R J E M Smeets *professor of rehabilitation medicine*[3], R W J G Ostelo *professor of evidence-based physiotherapy*[2 3], J Guzman *clinical assistant professor of medicine*[5], M W van Tulder *professor of health technology assessment*[4]

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Main findings at 1 yr (Kamper et al., 2015)

- **For pain and disability:** MD biopsychosocial rehabilitation more effective than usual care and physical treatments in patients with clbp.
- **Two trials vs back surgery:** little difference in outcomes, but higher risk of adverse events with surgery (and costs)

Authors concluded:

- **"A coordinated intervention covering several domains of BPS model is more likely to benefit patients with clbp in long-term than usual care or physical treatment alone"**

Sounds promising?

But what is **multi-disciplinary biopsychosocial pain management**? (apart from an awful mouthful)

- It is teaching patients with chronic pain how to limit its effects on their lives
- Using skilled health professionals from different disciplines
- All working in a collaborative manner using a common framework – a biopsychosocial model

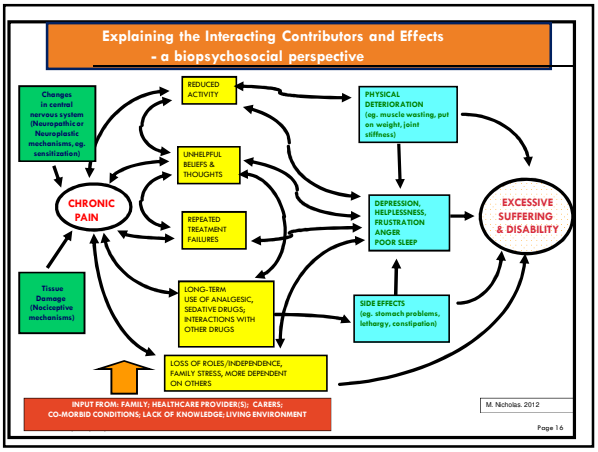
Multiple mechanisms involved

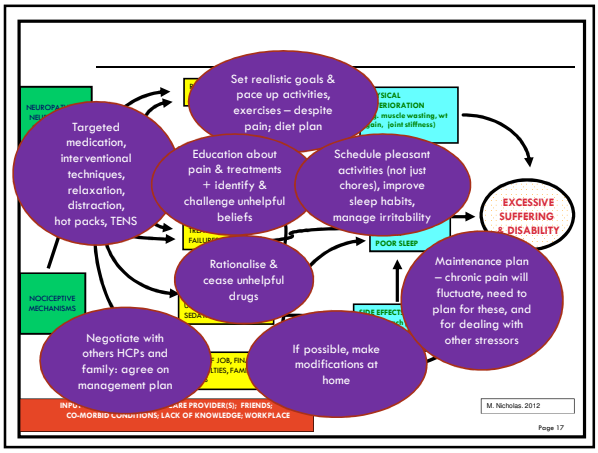
- **Multiple mechanisms: Bio – Psycho - Social**

Nociceptive
Neuropathic
Inflammatory
Neuroplasticity
(CNS changes
e.g., central
sensitization)

Attention
Mood
Beliefs
Coping responses
Behaviours
Conditioning
History
Personality

Reinforcement
contingencies
Conditioned cues
Demands
Social support
Culture

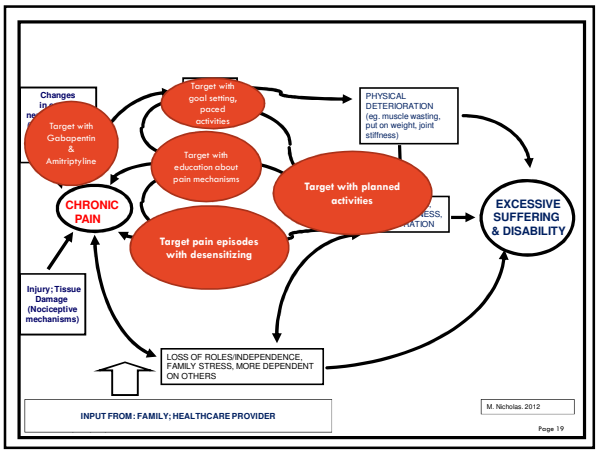




Single case study

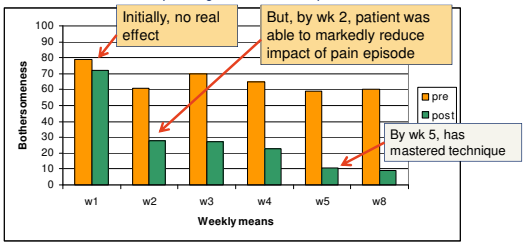
54 yr old woman (Ms XX)

- 15 yr history chronic post-surgical, abdominal pain
- Persisting background pain with episodic, severe bursts
- Sense of having no control, episodes unpredictable
- Diagnosed as neuropathic pain by Prof Phil Siddall
- Causing significant distress and disruption to daily activities
- Avoiding normally enjoyable activities (painting pictures, meeting friends) (In case had an episode)



Weekly (7 day) mean pre-post changes in bothersomeness
How much does the pain bother you? [0=not at all; 100=extremely]

Graph shows average of bothersome pain at onset of episodes for each week, followed by average bothersomeness when desensitizing technique used across each week – patient got better at it with practice



Outcome: resumed painting, meeting friends, going out more. Mood and self-efficacy much improved – lost fear of pain. Felt in control again.

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Defining pain self-management

- Many definitions
- Critically, the person is expected to play an **active role,**
- Can range from adhering to a prescribed medication regimen to exercise and meditation
- But the goals must be those of the patient and s/he must be prepared to work on achieving these goals

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Review by Stewart et al (Pain Med. 2014)

Pain 'self-management' has five defining attributes:

- a multidimensional process
- involves personal development,
- active individuals,
- symptom response, and
- symptom control (by the individual in pain).

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Common Pain Self-management Strategies

- Activity pacing
- Problem-solving
- Attention diversion
- Thought management
- Exercise
- Goal setting
- Relaxation/meditation
- Deliberate exposure to pain
- Adherence to treatment plan
- Self-monitoring
- Sleep management
- Assertiveness/communication skills

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Is it just a matter of handing over a list to the patient?

- Maybe, but patients have probably tried many already
- Von Korff et al (1997) wrote of "collaborative care"

- **Collaborative care = patients + providers:**
- shared goals,
- sustained working relationship,
- mutual understanding of roles/responsibilities,
- requisite skills for carrying them out.

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As in any treatment with a chronic illness

- Need to establish agreed understanding of the problems and contributors
- If we are using a biopsychosocial framework
- We need to explain this to the patient vs "try this and see if it helps"

Education: The next step … explaining the basics

- Next step in engaging client
  - Explaining the basics – acute vs chronic pain
  - How you do this may depend on your professional role, but the principles are the same

KEY MESSAGES

- we accept your experience of pain (validation)
- need to differentiate between acute and chronic pain
- **acute pain** = warning signal, tells us something (useful)
- **chronic pain** = 'fault in wiring' – not accurate, not useful
- different mechanisms in nervous system (e.g. central sensitization)

Communicating with patients

- The ability of clinicians to communicate with patients is critical to the implementation of treatments that require collaboration
- Research with physicians indicates possible benefits of effective communication skills include:
  - improved accuracy of problem identification,
  - greater patient satisfaction, and
  - better adherence to advice on behavior change

Maguire P, Pitceathly C. Key communication skills and how to acquire them. *BrMed J. 2002;325:697–700*

Communicating with patients

Common errors by clinicians:

- not exploring patients' beliefs,
- not referring to patients' beliefs in explanations of a condition,
- not checking patients' understanding of explanations provided.

Need to employ

- Active listening skills
- Checking understanding of explanations
- Multiple media (verbal, pictorial, written)
- Socratic questioning
- Show evidence of knowledge of subject, and recognition of limits
- Indication of seeking to work collaboratively vs directively (ie. not across a desk)
- Emphasis on a coordinated, multi-disciplinary approach

Does the use of specific self-management strategies make a difference?


EJP European Journal of Pain

ORIGINAL ARTICLE

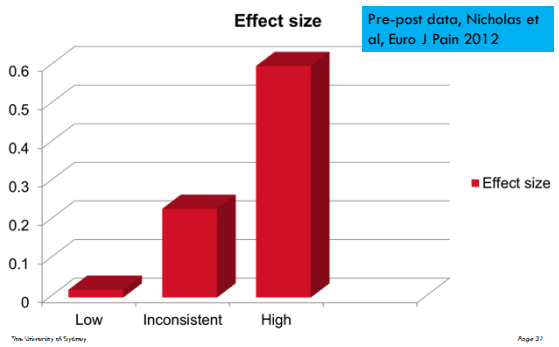
Is adherence to pain self-management strategies associated with improved pain, depression and disability in those with disabling chronic pain?

M.K. Nicholas[1], A. Asghari[1,2], M. Corbett[1], R.J.E.M. Smeets[3,4], B.M. Wood[1], S. Overton[1], C. Perry[1], L.E. Tonkin[1], L. Beeston[1]

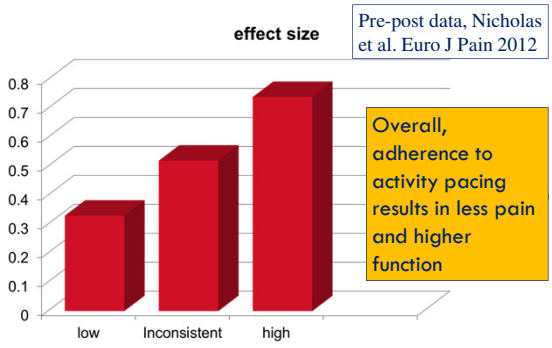
- N = 567 (Chronic pain patients attending comprehensive 3-wk PMP)
- 5 self-management strategies evaluated (goal setting, activity pacing, stretch exercises, desensitizing/relaxation, thought management)

(EJP 2012; 16: 93-104)

Adherence to activity pacing and effect size on pain severity at end of CBT program



Adherence to activity pacing and effect size on disability



In the Himalayas, Sherpas carry back packs, 90-100% of their body weight, over mountains 1000s of feet high, from dawn to dusk for days.

How do they do it?

Science, 2005

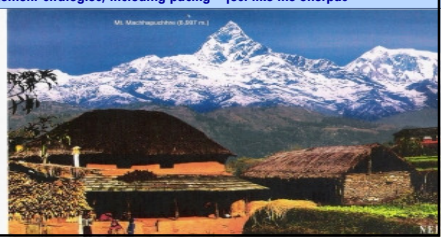
By pacing - taking regular breaks in climbing

Postcard from chronic pain patient

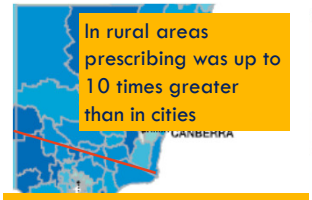
"We have been treking in the Annapurna region (in Nepal) - proof (if you needed more) that your treatments work!!!"

How did she do it?

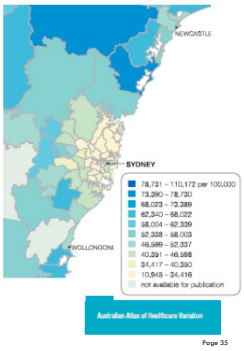
A regular (stable) dose of slow release analgesic
and
pain self-management strategies, including pacing – just like the Sherpas



Rates of opioid prescribing NSW (2013-14)



In rural areas prescribing was up to 10 times greater than in cities

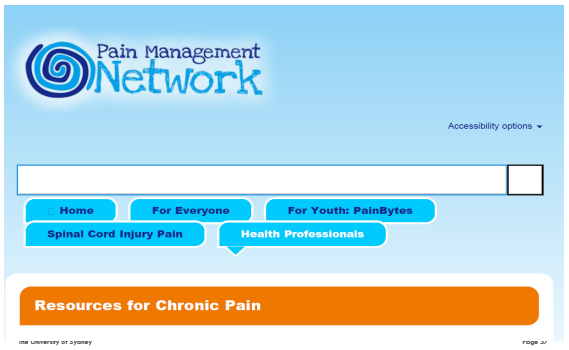


One explanation: availability of appropriate non-pharmacological treatment options, particularly in rural and remote locations

Agency for Clinical Innovation (ACI) (NSW) Pain Network

– http://www.aci.health.nsw.gov.au/networks/pain-management

Series of videos, information sheets for consumers and health professionals



Thank you