RACGP Specific Interests

TEMPO

The Non-Pharmacological Management of Chronic Non-Cancer Pain (CNCP)

General Practice in Addiction Conference 4-5 August 2018

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4/8/2018

Disclosures

- The Hunter New England and Central Coast Primary Health Network has provided a translational research grant for the evaluation of the effectiveness of the TEMPO learning package.
- We would also like to acknowledge the input of Dr Chris Hayes: Past Dean, Faculty Pain Medicine; Lester Jones, Pain Physiotherapist; Professor Michael Nicholas, Clinical psychologist, Sarah Overton, clinical psychologist; A/Prof Jill Gordon; GP psychotherapist; Dr Cathy Fraser, GP Psychotherapist; & Prof Parker Magin, Director, GP Synergy Research and Evaluation Unit.
- Professor Michael Nicholas receives royalties from his co-authored book, *Manage Your Pain*, ABC Books and Harper Collins Publishers.
- Dr Hayes has undertaken sponsored consultancy and educational work with Mundipharma, Janssen and Pfizer prior to 2013.
- Dr Newman Harris has declared payments for services from the same companies.

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Learning objectives

At the end of the session the participant will be able to:

1. make informed choices about *multimodal alternatives* to pharmacological management of chronic pain.
2. support patients develop the skills of *active self-management* to optimise function and social reintegration
3. educate patients about the *harms of opioids* in CNCP and to develop *strategies for non-initiation, de-prescribing* or *dependency provision* of opioids
4. assist patients to manage *common aspects of the chronic pain experience* such as poor mental health (e.g. depression, anxiety, family problems), sleep difficulties and dependency

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Chronic non-cancer pain

- The word "pain" is derived from the Latin word "poena" for penalty or punishment i.e. the meaning.
- Chronic Non-Cancer Pain (CNCP) is pain which has persisted beyond normal tissue healing time (deemed three months).
- "Non-Cancer" specifically excludes chronic pain of active cancer treatment & palliative care for end-of-life symptoms.

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A Biopsychosocial approach to chronic pain

Active self-management:

- Assessment and measurement
- Neuro-education
- Social activation: Family and work
- Cognitions, Beliefs & Mood
- Physical activation: Goals & Activity pacing
- Sleep
- Diet

Analgesics

- Medicines, deprescribing and drugs
- Opioids and harm minimisation

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TIME EFFICIENT MANAGEMENT OF PAIN IN THE OFFICE

Assessment

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TIME EFFICIENT MANAGEMENT OF PAIN IN THE OFFICE

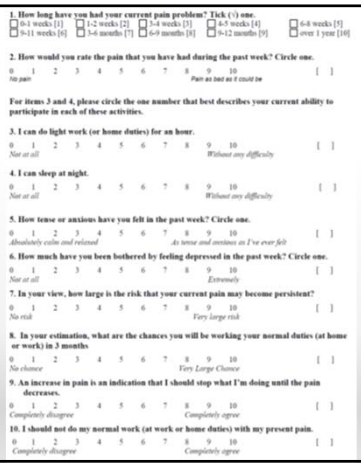
Initial Assessment

Ten-item Örebro[1]:

- Broadens conversations
- Screens for problem patients
- Indicator of delayed return-to-work risk.
- Can be administered by practice nurse and lead into care plan
- Routine in workers compensation care

1. Linton et al. Spine 2012; 36(22): 1891-95; Nicholas et al. J Occ Rehab (in press, April, 2018).

Örebro Musculoskeletal Pain Screening Questionnaire (short-form)



1. How long have you had your current pain problem? Tick (√) one.
☐ 0-1 weeks [1] ☐ 1-2 weeks [2] ☐ 3-4 weeks [3] ☐ 4-5 weeks [4] ☐ 6-8 weeks [5]
☐ 9-11 weeks [6] ☐ 3-6 months [7] ☐ 6-9 months [8] ☐ 9-12 months [9] ☐ over 1 year [10]

2. How would you rate the pain that you have had during the past week? Circle one.
0 1 2 3 4 5 6 7 8 9 10 [ ]
No pain *Pain as bad as it could be*

For items 3 and 4, please circle the one number that best describes your current ability to participate in each of these activities.

3. I can do light work (or home duties) for an hour.
0 1 2 3 4 5 6 7 8 9 10 [ ]
Not at all *Without any difficulty*

4. I can sleep at night.
0 1 2 3 4 5 6 7 8 9 10 [ ]
Not at all *Without any difficulty*

5. How tense or anxious have you felt in the past week? Circle one.
0 1 2 3 4 5 6 7 8 9 10 [ ]
Absolutely calm and relaxed *As tense and anxious as I've ever felt*

6. How much have you been bothered by feeling depressed in the past week? Circle one.
0 1 2 3 4 5 6 7 8 9 10 [ ]
Not at all *Extremely*

7. In your view, how large is the risk that your current pain may become persistent?
0 1 2 3 4 5 6 7 8 9 10 [ ]
No risk *Very large risk*

8. In your estimation, what are the chances you will be working your normal duties (at home or work) in 3 months
0 1 2 3 4 5 6 7 8 9 10 [ ]
No chance *Very Large Chance*

9. An increase in pain is an indication that I should stop what I'm doing until the pain decreases.
0 1 2 3 4 5 6 7 8 9 10 [ ]
Completely disagree *Completely agree*

10. I should not do my normal work (at work or home duties) with my present pain.
0 1 2 3 4 5 6 7 8 9 10 [ ]
Completely disagree *Completely agree*

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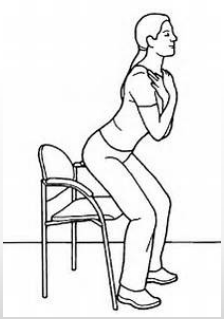
Reframing assessment: strength

Deconditioning due to inactivity:

The **F**ive **T**imes **S**it **t**o **S**tand Test.

This should take less than 15 seconds.



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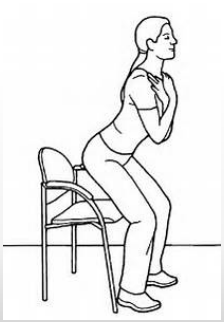
Learning Activity 1

Please stand up now for our own Five Times Sit to Stand Tests.



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Outcomes assessments: P.E.G.

Need to measure initially & measure regularly otherwise, care providers, including yourself, cannot monitor outcomes.

1. What number best describes your pain on average in the past week:

0 1 2 3 4 5 6 7 8 9 10

No pain — Pain as bad as you can imagine

2. What number best describes how, during the past week, pain has interfered with your enjoyment of life?

0 1 2 3 4 5 6 7 8 9 10

Does not interfere — Completely interferes

3. What number best describes how, during the past week, pain has interfered with your general activity?

0 1 2 3 4 5 6 7 8 9 10

Does not interfere — Completely interferes

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Krebs 2009 J of Gen Int Med

Learning Activity 2

1. What number best describes your pain on average in the past week:

0 1 2 3 4 5 6 7 8 9 10

No pain — Pain as bad as you can imagine

2. What number best describes how, during the past week, pain has interfered with your enjoyment of life?

0 1 2 3 4 5 6 7 8 9 10

Does not interfere — Completely interferes

3. What number best describes how, during the past week, pain has interfered with your general activity?

0 1 2 3 4 5 6 7 8 9 10

Does not interfere — Completely interferes

Introduce the PEG to your colleague beside you

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Neuro-education

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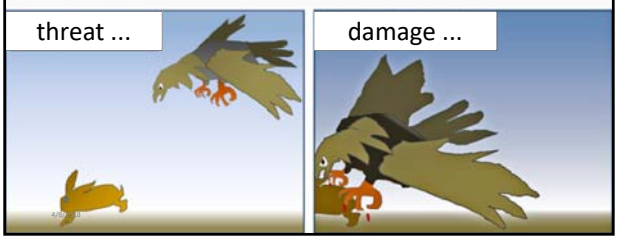
Patient education: acute pain

- Short term
- Often linked to body structures
  - under threat
  - damaged
  - indicating the urgency of response

Egloff J Pain Research 2013

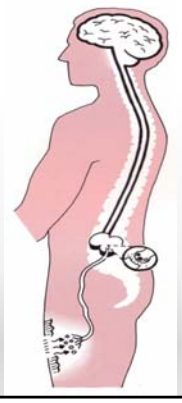


Patient education: chronic pain

- Lasts 3 months or more
- Often persisting after body structures repair
- **Wind up** of the whole nervous system

Egloff J Pain Research 2013

Contributors to pain



Sensitisation (neuroplastic or nociplastic)

Nerve injury (neuropathic)

Tissue injury (nociceptive)

Kosek PAIN 2016 Do we need a third mechanistic descriptor for chronic pain states?

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Target education to beliefs

Related to your pain, what is the thing that you are most afraid of?

What do you believe is the role of medications, or of activity?

Are you worried that something has been missed?

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Patient education

HIPS Brainman series:

- Understanding pain and what to do about it
- Brainman chooses
- Brainman stops his opioids

Workbooks

Rewire your pain: an evidence based approach to reduce chronic pain: Davies 2015

Manage your pain: Nicholas 2011

On-line

CBT: thiswayup or mindspot

Free Macquarie Uni pain course at the "eCentreClinic" https://ecentreclinic.org/?q=PainCourse

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ACI chronic pain website

https://www.aci.health.nsw.gov.au/resources/pain-management

N.B. site even includes resources such as draft care plans for CNCP

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A Biopsychosocial approach to chronic pain

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Social activation: participating with family & work

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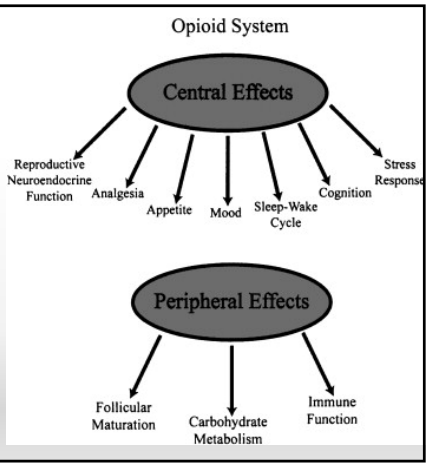
Pain physiology

Our endogenous opioid system modulates pain, mood, stress & social bonding.

It engages with the dopamine system (reward/punishment) to calculate which behaviours are unconsciously promoted.



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Theories of pain physiology: adapt & survive

Pain is not just a warning system.
Theorists write, "Pain is a call to action. Like hunger, thirst, and desire for sleep, pain is a part of the body's survival systems.[1]"

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[1] Porreca & Navratilova Pain 2017

Theories of pain physiology

Pain reflects a multisensory system of **danger-detection** to the individual (and to the tribe).
Flipping this over: love can be sacrificial.

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Social activation: Re-integration

Encourage personally relevant or meaningful social re-engagement

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Re-integration: Work

Early screen with Örebro to identify psycho-social yellow flags
Advise workplace modifications (activity pacing of duties & hours)
Co-ordination with insurer and workplace

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Re-integration: Family

Experimental pain thresholds are elevated by:

- the presence of a friend
- laughing with friends
- empathetic touch between romantic partners

4/8/2018 Edwards Pain May 2017, Manninen J of Neuroscience 2017, Goldstein J of Pain 2016

Re-integration: The role of the partner

. The health of the partner of the person with pain may suffer too
. Partners may facilitate recovery e.g. with distraction
. Partners may hinder recovery with criticism & hostility, or by discouraging autonomy

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Re-integration: The role of the partner

. Intimacy may suffer in CNCP with opioid consumption further reducing libido (Birke 2018)
. "Sensate focusing" describes a form of activity pacing based on desensitisation and awareness
. Be aware past traumas may intersect with current CNCP

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Re-integration: meaning

Identify and explore meaningfulness eg art or spirituality

Cognitions and emotions

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Pain Psychology: is like hitting the snooze button on the 'harm alarm'

The mind can be a window to our nervous system.

We can support patients to regulate their thinking (helpful self-talk) and regulate their emotions (self-calming). This will assist in the self-management of the pain-related distress and behaviours.

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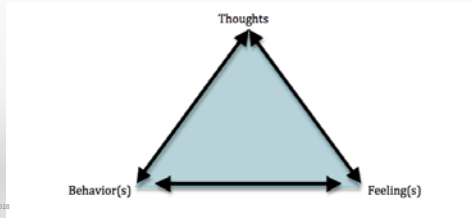
Beliefs

Self-monitor and regulate unhelpful thinking:

- Catastrophising
- Fear avoidance
- Black and white thinking

Encourage: Self-compassion & self-efficacy



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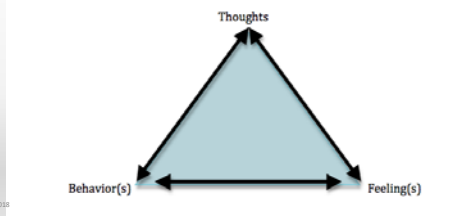
Mood: Depression

Bi-causal relationship with pain

Non-pharma therapy includes:

- relaxation
- scheduling pleasurable activities
- exercise
- behavioural activation
- healthy nutrition



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Active relaxation

Observation of the breath

There are many techniques of mindful self-calming.

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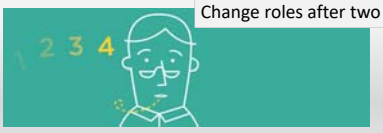
Learning Activity 3

Rehearse teaching your patient slow breathing exercise.

Form a triad:

- GP role
- patient role
- an observer

Change roles after two minutes



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Exposure and Response Prevention

Psychoeducation about the physical sensations behind anxiety and potential misinterpretations

Explaining breathing retraining and risks of safety-seeking or avoidance behaviours

Practicing self-exposure to those physical sensations the patient fear may evoke panic

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A Biopsychosocial approach to chronic pain

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- Medicines, deprescribing and drugs
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Physical activation: Goals & Activity pacing

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Active versus Passive Management

Passive:

Mobilisation

Injections

Hands-on therapy

Acupuncture

Electrotherapy eg ultrasound

Active:

Walking

Therapeutic exercise

Hydrotherapy

Swimming

Yoga/Pilates/Tai Chi

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Motion is the lotion

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Planning Goals

Prioritise competing needs through goal setting.
"Unpack" goals into achievable, concrete and measurable sub-goals.
Identify obstacles & "tolerances"

Discuss what needs to be worked on to reach the goals

Plan activities to these capacities and include 'upgrading'.

Review frequently and document progress

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Activity pacing

When establishing pacing the baseline should be below patient's capacity to aid confidence building.

Plan small, meaningful upgrades utilising objective outcomes:

- duration of exercise
- duration of rest*
- distance /step counts

Swapping tasks

Avoid under- & over- activity: "Stick to your activity plan/quota despite good or bad days."

The boom/bust trap increases break-through pain and use of short term opioids

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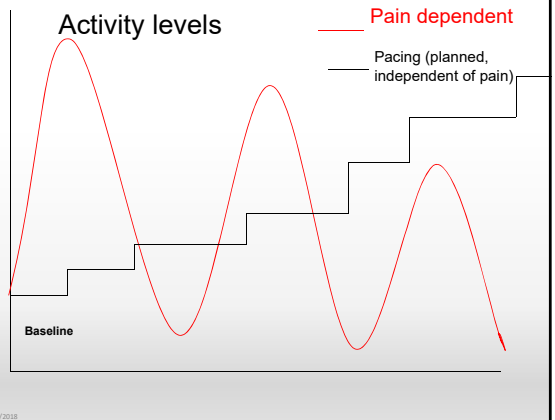
* Mitchell "Trials" 2016



Cognitive aspects of re-engagement in physical activity

- Redirect: "What can I do despite the pain?" rather than "What can I do to get rid of the pain?"
- Manage thoughts: increases in pain is normal with activity: "sore but safe."
- Deal with movement and activity related fear
- Self-calming techniques

Learning Activity 4

- Rehearse educating your patient with pain about goal setting & activity pacing for a couple of minutes then rotate roles.
- Activities to be paced may be related to work or family.

Form a triad:
- GP role
- patient role
- an observer

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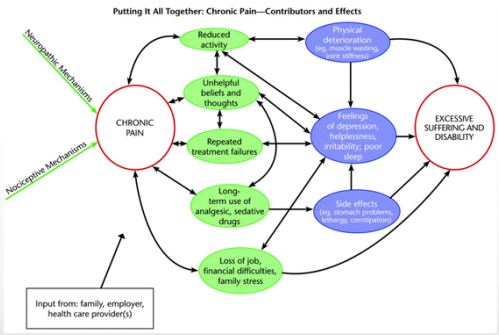

How using active strategies to address the 2° effects of pain reduces disability and suffering better than keeping on focusing on fixing it.

From: Psychologically Informed Interventions for Low Back Pain: An Update for Physical Therapists
Phys Ther. 2011;91(5):765-776. doi:10.2522/ptj.20100278 Michael Nicholas
Phys Ther | © 2011 American Physical Therapy Association

Sleep

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Insomnia

Prevalence: About 1 in 3 adults have an insomnia symptom
Psychological co-morbidity rates up to 80%.
Insomnia has a circular relationship with pain.
Cognitive therapy challenges their current maladaptive beliefs about sleep.

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Insomnia

CBT-i incorporates four **behavioural** elements: relaxation therapy, psychoeducation/sleep hygiene; stimulus control, sleep (or bedtime) restriction strategies

CBT-I produces reliable, durable benefits in 70% to 80% of patients (Buysse 2017)

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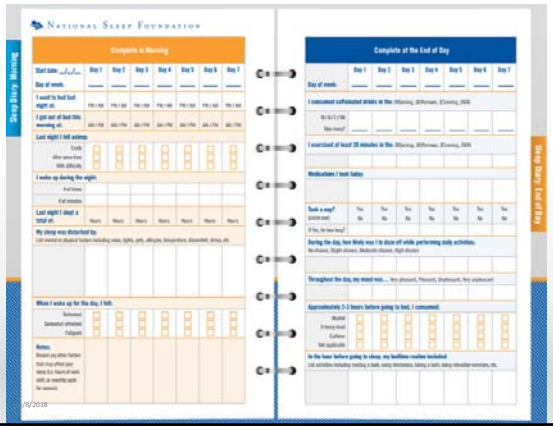
Arrange a Sleep Diary



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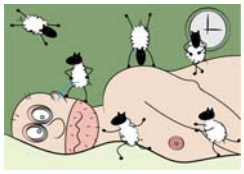
Psychoeducation or sleep hygiene



- what are normal sleep patterns and age-related changes
- environmental factors (e.g. light, noise, temperature).
- unhealthy practices (e.g. electronics before bed, clockwatching & substance use)
- time-restricted eating to coincide with the light-dark circadian rhythms: no food or drink (esp alcohol) after evening meal (Kuehn JAMA 2017); also helps weight and glucose tolerance.

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Stimulus control

Reinforces the association of the bed/bedroom with sleep to re-establish a consistent sleep–wake schedule

Rise at the same time

Avoid napping

Go to bed only when sleepy;

Bedroom for sleep only (or sex) so no reading or screens

If not asleep after about 15 minutes, leave the bedroom & do something non-stimulating.

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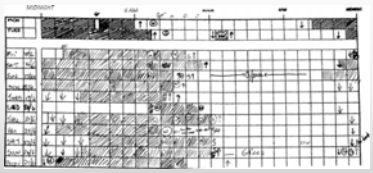
Sleep (or bedtime) restriction strategies

Curtails the time in bed to the actual duration of sleep being achieved.
Use sleep diaries to estimate sleep time.
Record both before bed & on awakening.
Re-establishing homeostatic sleep pressure requires several weeks.



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Learning Activity 5

Try delivering CBT-insomnia

.relaxation therapy
.psychoeducation/sleep hygiene
.stimulus control
.sleep (bedtime) restriction strategies

Here is my sleep diary, who will help me

Before sleep	In bed 2 hours: movies or internet gaming
Went to bed	Varied between 9 to 11pm
Got to sleep	Midnight to 1AM
Awakenings	Twice for about an hour each, 2 smokes (back pain)
Total sleep time	About 6 hours
Woke feeling	Fatigued all day
Out of bed	9am for breakfast.
Daytime activities	10am till lunch at 2-ish in front of TV watching the tennis. Finally got to doze off on sofa when back settled.

Specialists regard brief CBT-i as 4 x 90 minute sessions at the very least!

CBT-I helps stop benzos:
An RCT of 8 weeks CBT- Vs Benzo tapering alone; cessation at 12 months 70% Vs 24% (Baillargeon 2003)

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Diet

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Nutrition and eating

. Recommend five or more serves of vegetables & 2 of fruit and avoid sugary or processed food/drink.
. Western-style nutrition makes an "inflammatory diet" which changes the composition & function of the gut microbiota.
. The gut–CNS-axis modulates metabolism and also autoimmune responses, CNS homeostasis and inflammation (Fleck 2017).

http://healthyeatingquiz.com.au

Healthy food is good medicine

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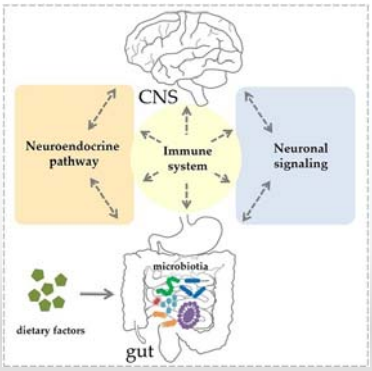
Nutrition and the microbiome



Fleck 2017 International Journal of Molecular Sciences

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Pharmaceuticals, deprescribing &/or dependency care

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BMJ

BMJ 2013;346:f2690 doi: 10.1136/bmj.f2690 (Published 3 May 2013) Page 1 of 6

ANALYSIS

Expect analgesic failure; pursue analgesic success

Most analgesic drugs work well but in only a small percentage of people. **Andrew Moore and colleagues** argue that we need to move away from a focus on average response and seek out what works for each patient

Andrew Moore *professor*[1], Sheena Derry *senior research officer*[1], Christopher Eccleston *professor*[2], Eija Kalso *professor*[3]

"For all drugs and in all conditions, fewer than half of patients achieved at least a 50% reduction in pain intensity."

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Deprescribing

Reducing polypharmacy may improve function.
Numbers needed to treat (NNT) to get 50% reduction in pain intensity (studies <12 weeks): tricyclics 3.6, SNRI 6.4; Gabapentinoids 7.5
(Finnerup 2015 Lancet Neurology)

Gabapentinoids produce feelings of relaxation, calmness & euphoria.
Nasal & IV misuse and fatal overdose are increasingly: "Lyrica parties."

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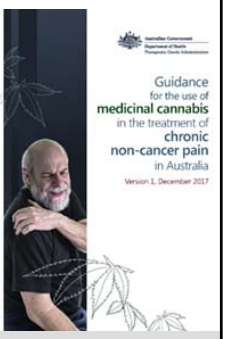
Cannabinoids and CNCP



Recent meta-analysis of 104 studies.

NNT (30%) 24 (95% CI 15 to 61)

NNH any adverse event 6 (95% CI 5 to 8)

Mean change in pain intensity ~3mm on a 100mm Visual Analogue Scale (Stockings Pain 2018)

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A retrospective description of long-term opioids in 38 patients was a watershed paper.

65. Portenoy RK, Foley KM. Chronic use of opioid analgesics in non-malignant pain: report of 38 cases. Pain 1986;25:171–186.

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Commercial CNCP education has taught that the "judicious" use of opioids are safe & effective.

Source http://www.opioidprescribing.com/overview Accessed on March 1, 2015

Continued marketing of certain formulations or opioids as better or safer reflects the triumph of hope over evidence.

Finally, RCT evidence on opioids effectiveness in CNCP

Design, recruitment outcomes, and sample characteristics of the Strategies for Prescribing Analgesics Comparative Effectiveness (SPACE) trial

Erin E. Krebs, Agnes C. Jensen, Sean Nugent, Beth DeRonne, Indulis Rutks, David Leverty, Amy Gravely, Siamak Noorbaloochi, Matthew J. Bair, Kurt Kroenke

One year pragmatic RCT opioid initiation Vs non-opioid analgesics

240 Vet Affairs opioid-naïve patients – moderate to severe chronic back/knee/hip pain

BPI-Severity pain intensity initially: 5.4 in each arm (JAMA March 2018)

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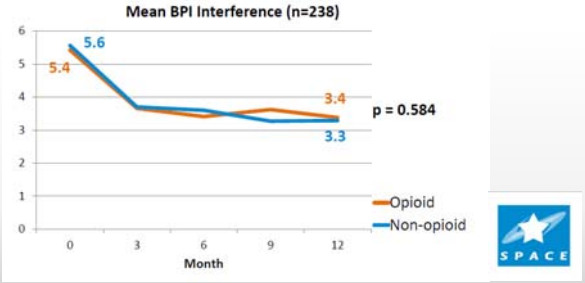
Pain interference with function



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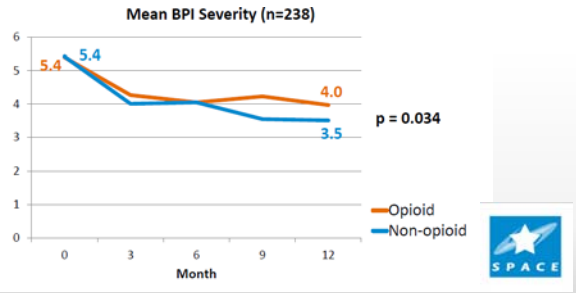
Pain intensity



Also Medication side effects significantly worse in opioid group.

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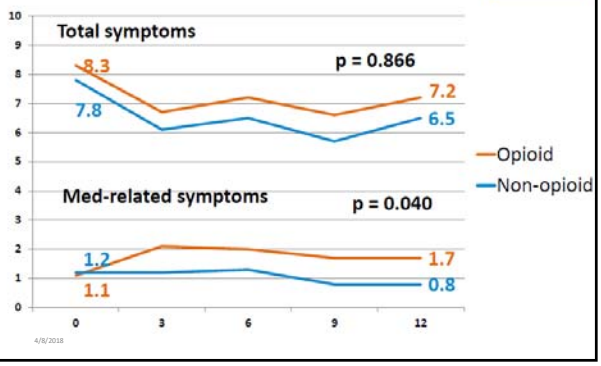
Adverse symptoms



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Tapering opioids: give and take

- A 22 week RCT of 35 outpatients willing to taper long-term opioids, compared treatment as usual Vs CBT-based pain self-management training administered by a physician assistant (not a specialist psychologist).
- While underpowered, the taper-support group had non-significantly lower opioid doses **without** worsening of pain. In fact, there was significantly reduced pain interference, pain self-efficacy and perceived opioid problems [1].
- A secondary study of 551 Danes being treated as usual & who ceased long-term opioids (half had a Substance Use Disorder) showed one year later pain intensity remained similar or was slightly reduced [2].

4/8/2018

[1] Sullivan 2017 Journal of Pain [2] Mitchell Pain 2018

Opioids in chronic pain: evidence indicates ineffective & unsafe

Toxicities include:

- Increased pain: Tolerance & hyperalgesia
- Longer periods of job disability, dose-related
- Depression (NNH: 1 in 12 after 90 days[1])
- Sleep apnoea & sleep disruption
- Misuse (1 in 4)[2]
- Addiction (1 in 10) [2]
- Overdose: especially high doses (1.8% p.a.[3]) increasing if with sedatives
- Epigenetic changes in drug seeking behaviour and drug tolerance across multiple generations[4]

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[1] Scherrer 2016; [2] Vowles 2015; [3] Dunn 2010; [4] Gilardi 2018

State & territory laws for prescribing S8's

For non-dependent Patients

Slide courtesy of Dr Walid Jammal, Senior Medical Advisor, Avant

QLD	• Notification (as opposed to a permit) and treatment report required if prescribed for longer than 2 months
NSW	• Only some drugs require authority when prescribed for more than 2 months
VIC	• Permit required if prescribing for longer than 2 months
TAS	• An authority is required to prescribe for longer than 2 months. If Alprazolam is also prescribed, authority is required after 1 month.
SA	• Authority required if prescribing for longer than 2 months
NT	• Notification (as opposed to authority) is required when prescribing an unrestricted S8 substance for more than an aggregate period of 8 weeks, or for more than 15 people, or in specific examples like when a patient attends saying they lost a prescription. See the Code of Practice for further examples
WA	• Authority is required when prescribing for more than 60 days
ACT	• Authority required if prescribing for longer than 2 months

Misprescribing is the 2nd most common cause of regulatory sanctions

Medication strategy

Stop starting them

- Initial prescription <1 week or double risk of use at one year (6% to 13% [1])
- Exclude suicidality
- Bystander naloxone
- Start opioid tapering or cessation whilst implementing multi-modal care.

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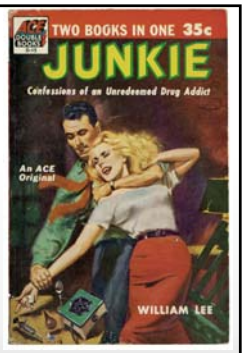
[1] Shah MMWR 2017

Opioid strategy



*Just as opioids relieve distress, so tapering may elicit its re-emergence, with labile erratic behaviour [1].
*Our patients may be somewhere on the highly stigmatised spectrum of dependence.
*There is a strong evidence base involving many RCTs that providing structured methadone or buprenorphine as opioid substitutes minimises harms.

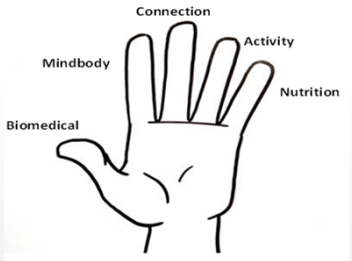
*Universal precautions = methadone-programme-like strategies e.g. contracts, urine toxicology, checking Prescription Shopping Line & Victoria's proposed Script-safe etc.

4/8/2018

[1] Manhapra, Arias & Ballantyne 2017 Substance Abuse

Learning Activity 6

The HIPS formulation of biopsychosocial management



Referring to a patient with chronic pain on long-term opioids, explain their management using the whole person 'hand.' Discuss with your neighbour over 3 minutes….

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Conclusion

We harm our patients if we assume that pain care is all about opioids & that opioid provision is all about excluding addictions. "Total pain" care requires less sensory focus: avoiding or deprescribing passive therapy such as "the plant of joy."

For hope and recovery:
. Assess/measure (Örebro & PEG)
. Provide informational support: education
. Provide motivational support: coaching towards multi-modal, active self-management of their multiple chronic morbidities.
For ongoing opioids: aim to minimise harms with methadone-programme-like dependency care.

4/8/2018