### A Workshop on Complex Chronic Pain Cases

The Hunter Postgraduate Medical Institute Taree GP Network Meeting

Thursday, 17 October 2024, 7:30 am to 8:30 am

## Dr Simon Holliday

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Conjoint Lecturer, School of Medicine & Public Health, University of Newcastle
HealthHub Taree, 15 Butterworth Lane, Taree NSW 2430

Potential conflict of interest: I have received honorariums from Indivior for two other presentations.

I pay respect to Elders past, present and emerging and endorse the Uluru statement which asserts that the sovereignty of our Aboriginal and Torres Strait Islander people has never been ceded or extinguished and co-exists with the sovereignty of the Crown.

### Presentation map



- Appreciate the non-analgesic functions of opioids
- Review the recent NHMRC guidelines on deprescribing.
- Consider the active self-management of chronic pain
- Examine harm minimisation in pain management
- Discuss the management of the grey zone between acute and chronic pain and chronic pain and dependency.

# Case One: Complicated acute pain: Ms JN aged 53



Ms JN is a new patient to you and to your practice. She has been here caring for her late mother and now clearing out the house.

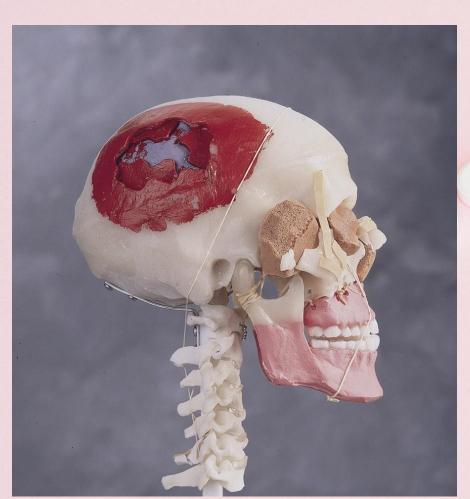
She presents with severe headache and loss of balance 10 days after blunt trauma to her head from a fall. She had been to ED twice already and been sent home. The ED doctor's shortacting oxycodone 5mg is barely holding her pain.

You chase the CT results and are told that the CT brain and neck results were reported as normal.

What to do?

# Case One: Complicated acute pain: Ms JN aged 53

Her past history includes: PTSD, Anxiety and depression



Ever since her mother had died, insomnia.

Back pain: a pain physician has prescribed tapentadol for 7 years. Was to go from 400mg to 300mg but with this injury, returned to 400mg.

Meds: Tapentadol 200mg twice a day

Paracetamol 500mg + Codeine Phosphate 30mg 2 when needed

Desvenlafaxine 100mg 2 nocte.

Mirtazapine 15mg Tablet 1 nocte, though this had just ran out.

She smokes and she vapes.

What are the risks of long-term opioid analgesics in chronic pain?

### What are the risks of chronic opioid analgesic therapy

### **Toxicities** include:

Increased pain: tolerance & hyperalgesia

Opioid receptors "internalise" causing tolerance



Opioids / Nerve damage  $\rightarrow \uparrow$  inflammatory proteins (e.g. S1P)  $\rightarrow \uparrow$  Neuropathic pain & Opioid Induced <u>Hyperalgesia</u>



### Question: What are the risks of chronic opioid analgesic therapy

### **Toxicities** include:

- Increased pain: tolerance & hyperalgesia
- Longer time to return to work
- Depression (NNH: 1 in 12 after 90 days<sup>1</sup>)
- Misuse (1 in 4)<sup>2</sup>
- Addiction (1 in 10)<sup>2</sup>
- Overdose: (with a linear-dose relationship, OR is 2.57 at 90mg oMEDD<sup>3</sup>)
- Diversion
- A potential inability to ever taper or cease



<sup>1</sup> Scherrer 2016; <sup>2</sup> Vowles 2015; <sup>3</sup> Li Wang 2023

# Case One: Complicated acute pain: Ms JN aged 53



Her past history includes: PTSD, Anxiety, depression, diabetes and insomnia since her mother died.

Back pain for 7 years on Tapentadol prescribed by a pain physician. Was meant to reduce from 400mg to 300mg but has gone back up with this episode.

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She smokes and she vapes.

### Question:

While prescribing of most opioid analgesics has decreased, Australian tapentadol pack sales increased from 5,077 to 1,528,963 from 2013–2019. (Darke 2022 D&A Rev)

Is tapentadol a safe, low-risk option?

# Case One: Complicated acute pain: Ms JN aged 53



You diagnose serotonin syndrome and commence de-prescribing the dose of tapentadol & limiting dispensings to second daily.

You review her 10 days later, she still has headaches though feels less foggy and denies any further falls.

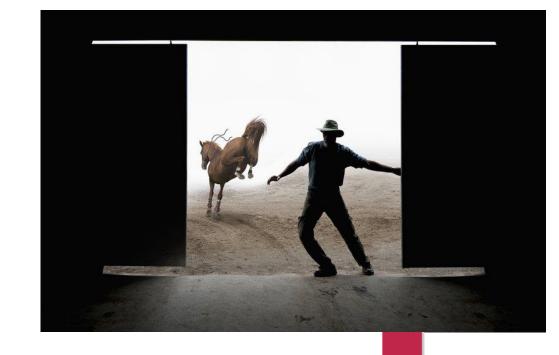
Examining her neck shows movements worsen the headaches and cause the dizziness.

She was referred to the physio and to her usual psychologist to address pain, grief and depression.

What is "de-prescribing"? Should we do it? If so, how?

<u>De-prescribing opioids</u> (aka 'How to close the door after the iatrogenic horse has bolted')

Our working group evaluated and summarised the evidence which informed an MJA paper and were adopted as the NHMRC guidelines.



Guideline summary

# Clinical practice guideline for deprescribing opioid analgesics: summary of recommendations

Aili V Langford<sup>1,2</sup>, Christine CW Lin<sup>3</sup>, Lisa Bero<sup>4</sup>, Fiona M Blyth<sup>2</sup>, Jason Doctor<sup>5</sup>, Simon Holliday<sup>6</sup>, Yun-Hee Jeon<sup>2</sup>, Joanna Moullin<sup>7</sup>, Bridin Murnion<sup>2,8</sup>, Suzanne Nielsen<sup>9</sup>, Rawa Osman<sup>10</sup>, Jonathan Penm<sup>2,11</sup>, Emily Reeve<sup>1,12</sup>, Sharon Reid<sup>2</sup>, Janet Wale<sup>13</sup>, Carl R Schneider<sup>2,\*</sup>, Daniiela Gniidic<sup>2,\*</sup>

ain and pain-related conditions are a leading cause of disability and disease burden globally, with one in five adults aged 45 years and over reporting persistent, ongoing pain. Opioids are commonly prescribed for the management of pain, and increases in the use of prescription opioids have been observed globally over recent decades, particularly in Organisation

#### **Abstract**

Introduction: Long term opioids are commonly prescribed to manage pain. Dose reduction or discontinuation (deprescribing) can be challenging, even when the potential harms of continuation outweigh the perceived benefits. The Evidence-based clinical practice guideline for deprescribing opioid analgesics was

MJA online: 26 June 2023

# When to deprescribe

01

### Consensus Recommendation

We suggest developing and implementing a deprescribing plan for persons being prescribed opioids at the point of opioid initiation.

02

### Conditional Recommendation for (Very low certainty evidence)

We suggest initiating deprescribing for persons taking opioids for chronic non-cancer pain, if (any of the following):

- a) there is a lack of overall and clinically meaningful improvement from baseline in function, quality of life or pain,
- b) there is a lack of progress towards meeting agreed therapeutic goals, OR
- c) the person is experiencing serious or intolerable opioid-related adverse effects in the physical, psychological or social domains.

Start deprescribing by not initiating or keeping to three or less days only (Nguyen 2024)
As most patients are inherited, do not assume liberal provision.
Initiate functional outcome measures (see later)

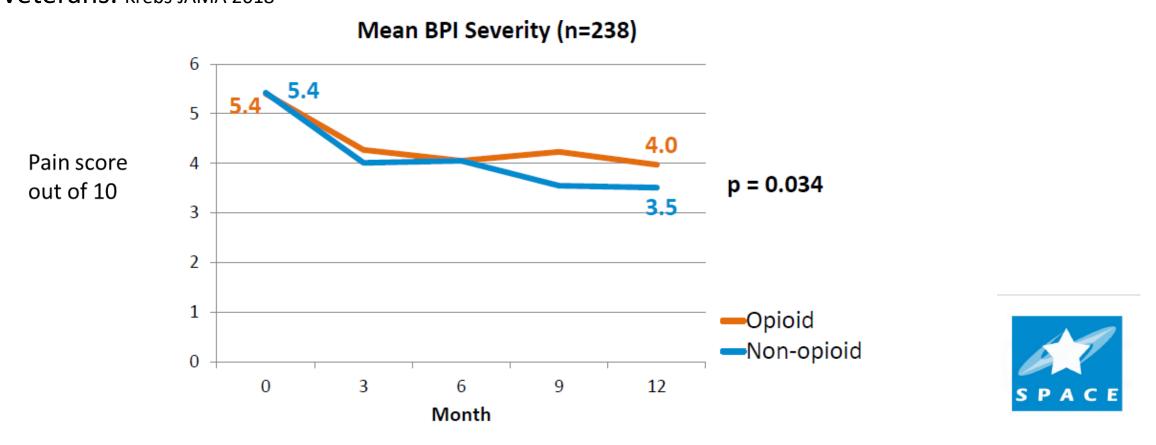
\*Invite the patient to discuss if opioid therapy has lived up to their expectations (Sullivan 2021 PAIN)

- \*Look at <u>functional</u> outcomes which should be:
- 1. similar to those of someone of same age and gender or,
- 2. substantially better than preopioid commencement (Manhapra 2022).

### Chronic opioid analgesia: outcomes

Short-term outcomes: Sullivan (2010 PAIN) found pain scores before each dose of opioids averaged 6.3/10 and 2 hours afterwards 3.5/10

<u>Long-term outcomes:</u> The single RCT of significant duration was done in 240 opioid-naïve US Veterans. Krebs JAMA 2018



Over the year, opioids did not significantly improve pain & functional outcomes.

# When not to deprescribe

### Consensus Recommendation

We suggest avoiding deprescribing for persons taking opioids for pain or dyspnoea who are nearing the end-of-life.

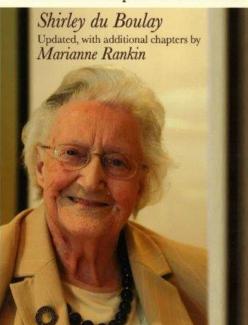
The hospice movement of Cicely

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### CICELY SAUNDERS The founder of the

Modern Hospice Movement



### tion against

bing for persons taking opioids with est that evidence-based care, such tion assisted treatment of opioid

Saunders highlighted the "total pain" of dying, encompassing physical, emotional, psychosocial, and spiritual dimensions.

# When not to deprescribe

05

### Consensus Recommendation

We suggest avoiding deprescribing for persons taking opioids for pain or dyspnoea who are nearing the end-of-life.

06

# Conditional Recommendation against (Moderate certainty evidence)

We suggest avoiding opioid deprescribing for persons taking opioids with a severe opioid use disorder and suggest that evidence-based care, such as transition to, or referral for, medication assisted treatment of opioid use disorder is provided. Patients have suffered expulsion from care following a doctor's moral outrage on the detection of addiction. Such abandonment is unethical and hazardous.

## How <u>not</u> to deprescribe







# How to deprescribe

07

Recommendation for (Low certainty evidence)

We recommend gradual tapering of opioids. Abrupt cessation of opioids without prior dose reduction may increase risks of harm.

In a US study of 600,234 dose reductions, 5.8% were followed by an ED visit, < 0.1% by an opioid overdose & 0.1% by death.

Lower rates where reductions were faster than 15% per 2-months (Metz 2023)

08

Recommendation for (Very low certainty evidence)

We recommend tailoring the deprescribing plan based on the person's clinical characteristics, goals and preferences.

While tapering is best negotiated; de-liberalising does not require consent.

09

### Consensus Recommendation

We suggest conducting regular monitoring and review of a person taking opioids throughout the opioid deprescribing process. Response against agreed therapeutic goals contained in a deprescribing plan should be regularly assessed. Many will believe this is an impossible goal, so ensure regular support.

# How to deprescribe

10

# Conditional Recommendation for (Low certainty evidence)

When available, we suggest the use of interdisciplinary or multidisciplinary care, or a multimodal approach which emphasises non-pharmacological and self-management strategies to deprescribe opioids.

77

# Conditional Recommendation for (Very low certainty evidence)

We suggest the consideration of evidence-based co-interventions to support opioid deprescribing.

# Multidisciplinary care, Multimodal care and co-interventions

Multidisciplinary care can be found in the tertiary ecosystem. With long waiting times, for most of our patients it is inaccessible, financially or geographically.

Multimodal chronic pain care describes strategies GPs <u>already routinely use</u> within the Chronic Disease Management model of care

Such strategies are also suitable for:

- "Total Pain" care
- lifestyle medicine
- positive psychology

### Chronic pain

Overlap and specificity in multimorbidity management



CPD CD

Laura Bruggink, Chris Hayes, Gali Lawrence, Katherine Brain, Simon Holliday CHRONIC NON-CANCER PAIN (CNCP) is commonplace and costly. In 2018, 3.24 million Australians were living with CNCP, costing the country \$73.2 treatment is unlikely to be effective in the long term.<sup>4</sup> 'Red flag' conditions need to be screened for, then treatment typically involves medication

#### Bruggink 2019 AJGP

VOLUME 41: NUMBER 3: JUNE 2018

ARTICLE

### Prescribing wellness: comprehensive pain management outside specialist services

#### Simon Holliday

Staff specialist<sup>1</sup> General practitioner<sup>2</sup>

#### Chris Hayes

Specialist pain medicine physician<sup>3</sup>

#### SUMMARY

Opioids have important roles in the time-limited treatment of acute and cancer pain, end-of-life pain or dyspnoea, and in opioid dependency.

# Contemporary chronic pain care now utilises a biopsychosocial approach.

What does this involve?



### **Active self-management:**

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

### **Analgesics**

- Medicines, deprescribing and drugs
- Opioids and harm minimisation

### Time and money matters

# Case One: Complicated acute pain: Ms JN aged 53



Her past history includes: PTSD, Anxiety, depression, diabetes and insomnia since her mother died.

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She smokes and vapes.

### Question:

JN is awaiting her MRI to direct her next procedure that will cure her pain.

Rates of ordering routine scanning for bad backs.

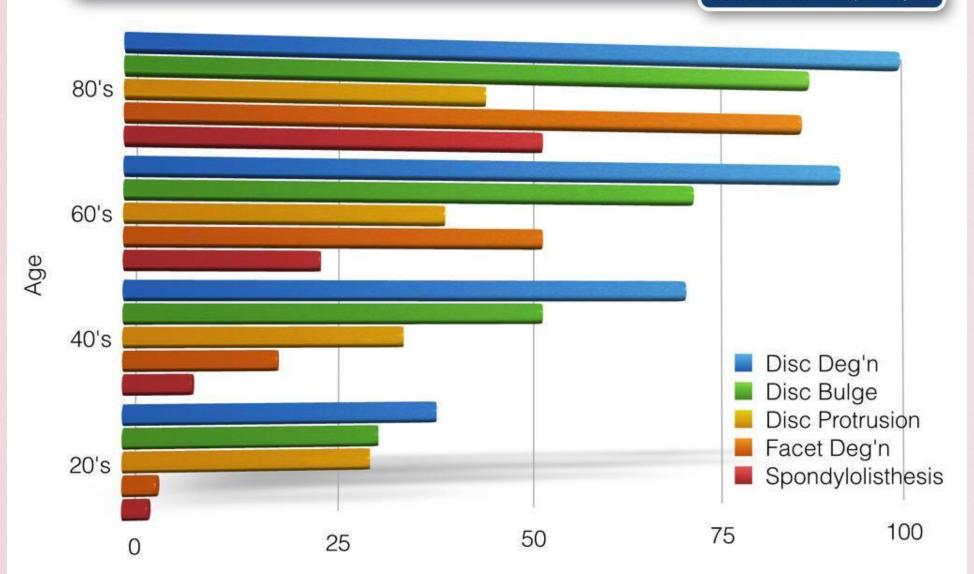
Too much or too little?

In the West, over half back pain presentations trigger imaging. This may contribute to escalating spinal surgery (despite the poor evidence for improved outcomes) (Evans 2023)

# Percentage of 'abnormal' findings on lumbar spine MRI & CT images in healthy pain free subjects

Brinjikji et al: Am J Neuroradiol (2014)

@adammeakins The Sports Physio



# Case Two: Workers comp knee injury: Mr DT 38



A new patient to you and to your practice works in hardware. He injured his knee unloading pallets a week ago. After a "pop", he had sudden pain and immediate swelling.

Clinically, he has a meniscal tear and a minor cruciate tear. You strap the knee, arrange an X-ray, fill in the workers comp forms and refer him to a physio.

Over the next two months his knee pain is worsening especially after a shift or after physiotherapy.

His orthopaedic surgeon wants to do an arthroscopy, which the insurer refuses to cover. He remains in a lot of pain despite physiotherapy, maximal NSAIDs and paracetamol. He is feeling desperate as he is unable to work or sleep or go surfing with his kids.

What needs to be done before commencing a trial of opioid analgesics?

# Case Two: Workers comp knee injury: Mr DT 38



8 years ago: SLAP tear of the shoulder treated with an arthroscopic acromioplasty and three subsequent operations

7 years ago: back injury with a T6 fracture

On quetiapine 25mg 1 nocte, NSAIDs, paracetamol, topical Rx

You take a careful D & A and Mental Health history.

10 years ago: Diagnosed with depression and bipolar affective disorder. He certainly is depressed now. He does not describe any episodes of mania and you question the diagnosis of bipolar.

Mr DT declines opioids. He says he became "addicted" to oxycodone when he had the shoulder and back problems.

Strong pain killers and the triggering of addictions cause passionate disagreements.

Let us look at the science underlying this.

### The function of endogenous opioids

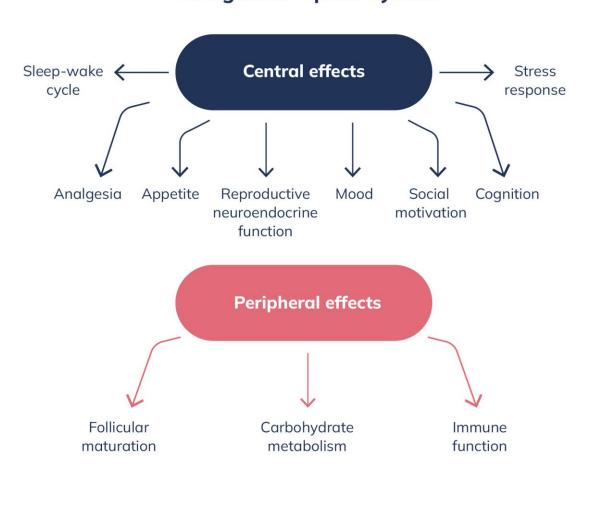
Our endogenous opioid system modulates the experience of pain.

However, some theorists believe its primary role may be modulating social attachment and group formation (social reward and social pain)<sup>1</sup>.



Sam Burgess in the 2014 NRL grand final

### **Endogenous Opioid System**



1. Carr 2017 Pain Medicine

2. Adapted from Eyvazzadeh Fertil Steril 2009



# Case Two: Workers comp knee injury: Mr DT 38



Another two months later, Mr DT's pain and problems are worse.

The insurer stated the injury did not occur at work and refused to fund the arthroscopy surgical fee.

His work laid him off and his relationships with his wife and son are imploding.

What should we consider managing this chronic pain?

### Consider suicidality

Relational aspects of pain (NB endogenous opioid system).

Referral to a psychologist

His sense of injustice may drive his pain.

Using broader outcome measures, not just pain intensity scores.



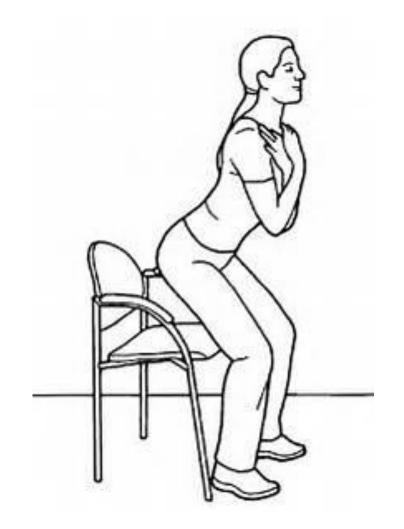
# **Functional Assessment**

Deconditioning due to inactivity:

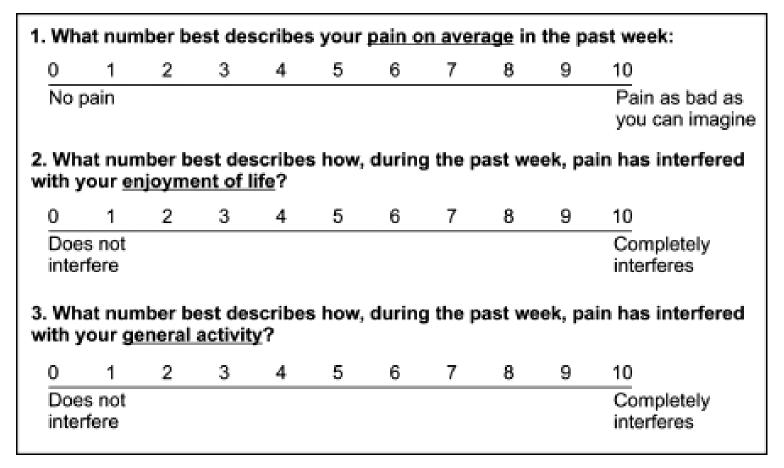
The **F**ive **T**imes **S**it **t**o **S**tand Test.

This should take less than 15 seconds.

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



# Outcomes assessments: P.E.G.



Krebs 2009 J of Gen Int Med

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

# Case Two: Workers comp knee injury: Mr DT 38



When he told his previous GPs that he couldn't sleep from the pain, they gave him benzodiazepines.

Which comes first; poor sleep or worsened pain?

So how better could we manage his sleep?

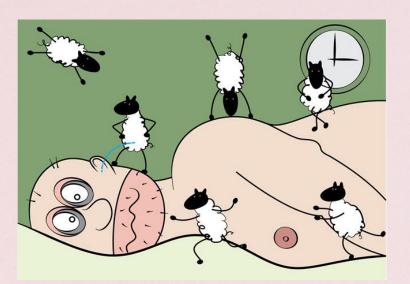
First line treatment is cognitive behavioural therapy for insomnia.

What is CBT-i?

### CBT-i incorporates 4 elements:

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

### Psychoeducation / sleep hygiene



- Discuss what are normal sleep patterns and age-related changes
- Address environmental factors (e.g. light, noise, temperature).
- Identify 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). This also helps weight and glucose tolerance.

### Stimulus control

<u>Aim</u>: To re-associate the bed/bedroom with sleep & to re-establish a consistent sleep—wake schedule

Go to bed only when sleepy;

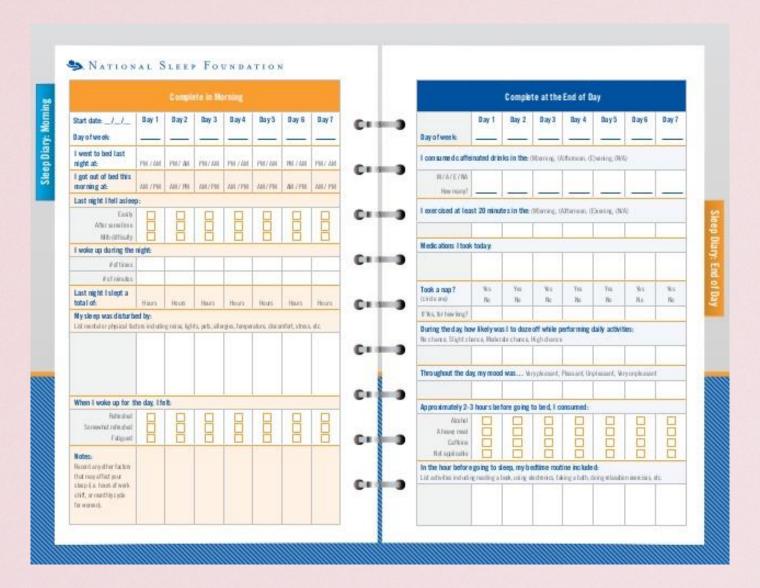
Get up at the same time every morning

Do not nap during the day
Limit bedroom activities to
sleep and sex (e.g. no reading,
no TV)



If unable to sleep after about 15 minutes, get out of bed and go to another room and do something non-stimulating.

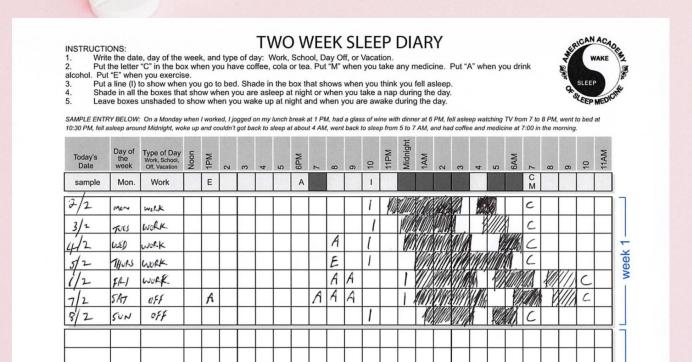
### A Sleep Diary is vital



# Sleep (or bedtime) restriction strategies

This is a behavioural therapy to curtail the time in bed to the actual amount of sleep being achieved.

- Use a sleep diary to estimate sleep time; with recordings both before bed & on awakening.
- Do this both before starting and during weekly follow-ups.





Sleep rescheduling/restriction may take 3-4 weeks to become effective.

- https://www.thecut.com/2015/10/getbetter-sleep-maybe-try-stayingawake.html
- https://sleephub.com.au/sleeprestriction/
- https://www.goodpath.com/learn/sleeprestriction-therapy
- Digital CBT-i e.g. This Way Up

### Case Three: Tapentadol analgesia problem: Ms KS 27



Ms KS played contact sport throughout university and after graduating as a professional. Occasionally prescribed Tapentadol for various ligament injuries.

Alcohol: after a game she would drink 18 SDs at which times she would smoke a few cigarettes.

She had a past history of anxiety and trauma from a sexual assault.

After a fracture complicated by post-operative neuropathic pain, she required tapentadol 50mg bd and Lyrica. She noted tapentadol stopped all her negative and racing thoughts. She had tried duloxetine and escitalopram and was on quetiapine for insomnia.

She denied ever injecting or using illicit drugs but had been topping-up tapentadol "from a friend" and was chewing 600-800mg per day (oMEDD=240mg morphine).

What would you do?

### Case Three: Tapentadol analgesia problem: Ms KS 27



I prescribed a lidocaine patch, capsaicin cream and agomelatine for her depression and advised that she cease alcohol and tobacco.

I provided take-home naloxone. What is this?

I provided dispensing of a few days of tapentadol at a time, reducing by 50mg per week and discussed methadone or buprenorphine.

She found she could not reduce as if she missed or reduced her tapentadol, she became irritable with vomiting, diarrhoea and restless legs.

She has opioid dependency. Does she need a formal methadone or buprenorphine programme?

We should feel comfortable titrating elements of such formal programmes to the degree of psychosocial dysfunction.

### Medication assisted treatment for opioid dependence (MATOD) aka Restrictive Prescribing.

MATOD is an evidence-based model of care designed for harm minimisation. Therapeutic boundaries are titrated to progress; with a spectrum of provision styles from repressive to liberal. It involves strategies as outlined in the box.



### **De-liberalizing strategies**

- . a single prescriber
- . a single pharmacy
- . no early prescriptions
- . lost medications not replaced
- . daily dispensing
- . supervised doses
- . Caution with tapering or ceasing due to risks of harm
- . urine drug testing
- . checking injecting sites

Or Gordon & Sanders
O.A.M. M.B. B.S (Syd. Univ.)

7 Breckenridge Street FORSTER NSW 2428 Ph: 02 6554 6822 Fax: 02 6554 5055

A.C.N. 002 164 847

10th April 2002

Dr. Simon Holliday, 11 Lansdowne Rd. LANSDOWNE 2430

Dear Simon,

In reply to your letter about our training session at Wallsend a couple of years ago, I did say that my life span has taken me through the discovery and use of sulphonamides, penicillin and so many wonderful advances in medicine. In fact, I was in an Australian Medical Unit in W.W.2 which was the first to use penicillin which Prof. Florey brought to us in person in his pocket but few advances have given me as much satisfaction as the introduction and use of Methadone. There is no need to enlarge upon the way unfortunate addicts have broken into doctors surgeries and houses and attacked people in their desperate clamour for drugs. How frustrating trying to treat them without Methadone.

You can quote me anytime.

With best wishes and kind regards.

Yours Sincerely.

G.E. Sanders

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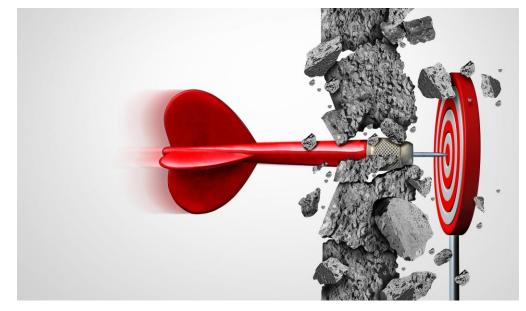
### Towards a more integrative approach between pain and addictions

Buprenorphine clinically provides analgesia like full μ-opioid receptor agonists and seems to have anti-hyperalgesic properties. Urits 2020 Best Pract Res Clin Anaesthesiol.

It offers a lower risk of respiratory depression and a safe potential off-ramp into addiction care. A recent formulation is depot buprenorphine (weekly or monthly) which has revolutionised the challenges of long-term opioids.

It stabilises serum levels and side-steps aberrant behaviours such as parenteral use, doubling up and diversion.

However, depot buprenorphine's current TGA-approved indication is only for dependency care, not analgesia!



The opportunity to treat pain and dependency simultaneously with buprenorphine, while promising, has been little studied.

Miller 2023: A Guide to Expanding the Use of Buprenorphine Beyond Standard Initiations for Opioid Use Disorder

# Conclusion

We harm our patients if we assume that chronic pain care is all about opioids & that opioid provision is all about excluding addictions.

### To promote hope and recovery:

- Measure (Five sits-to-stands & PEG).
- Support multi-modal, active self-management for their pain and multiple chronic morbidities.
- Avoid initiating &/or deprescribe medications that mimic and hijack our endogenous opioid system.
- For any ongoing opioids, titrate methadone-programme-like strategies.

