

Over the counter, down the hatch

OTC codeine use

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Turning Point

TREATMENT · RESEARCH · EDUCATION

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GREAT HEALTH AND WELLBEING

OTC analgesics

- OTC codeine: a reflection
- Pharmaceutical opioids
- Over the counter...
- The special case of codeine
- Treatment of codeine dependence

2007: A REFLECTION

What's going on?

- NSAID related presentations
- 24, 48 & 96 tablets a day
- Clinical “fingerprint”



Mr CT, 50-years old

- Presents to ED with 6 months pallor and fatigue
- Past history
 - Anaemia & GU on endoscopy
 - Chronic back pain initially oxycodone, OTC codeine when this was ceased
 - “NSAID related ulcer”, initially no referral to AOD

Mr CT, 50-years old: investigations

- $K^+ = 3.1$
- $Cr = 0.05$
- $Hb = 110$
- Abnormal LFTs

Mr CT

- Taking 48 OTC ibuprofen-codeine tablets daily for 6 months
- Commenced treatment with buprenorphine-naloxone
- Good outcome to therapy

PHARMACEUTICAL OPIOID ADDICTION

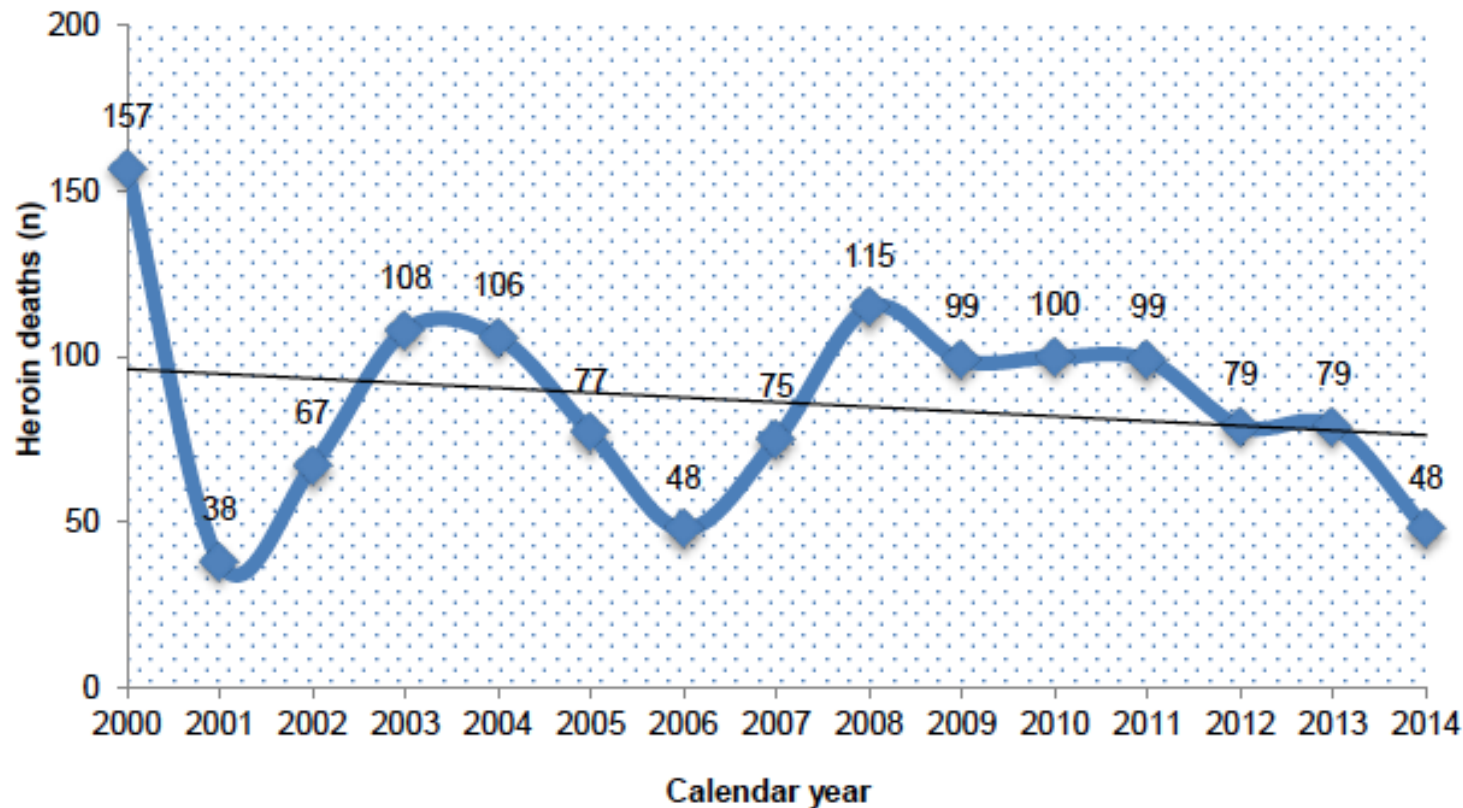
21st Century Substance Use



- Polysubstance abuse
- Methamphetamine
- Hybrid & “medicinal” cannabis markets
- New devices
- “Novel psychoactive substances”
- Pharmaceutical drugs
 - benzodiazepines
 - opioids

Heroin-related deaths: Victoria, 2001-2014

Figure 18: Heroin-related deaths, Victoria, 2000–2014*

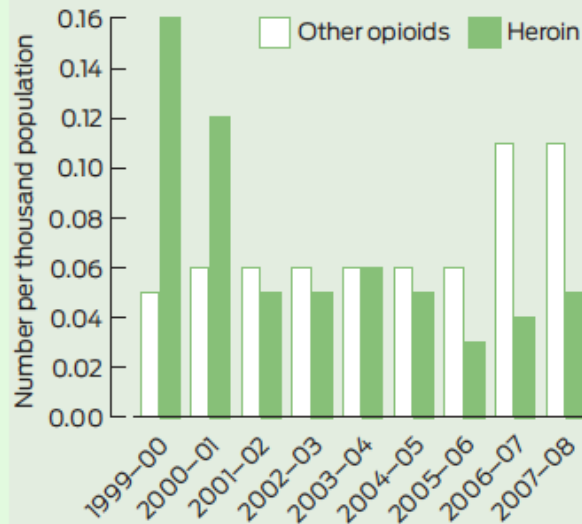


Source: Victorian Department of Health, 2014

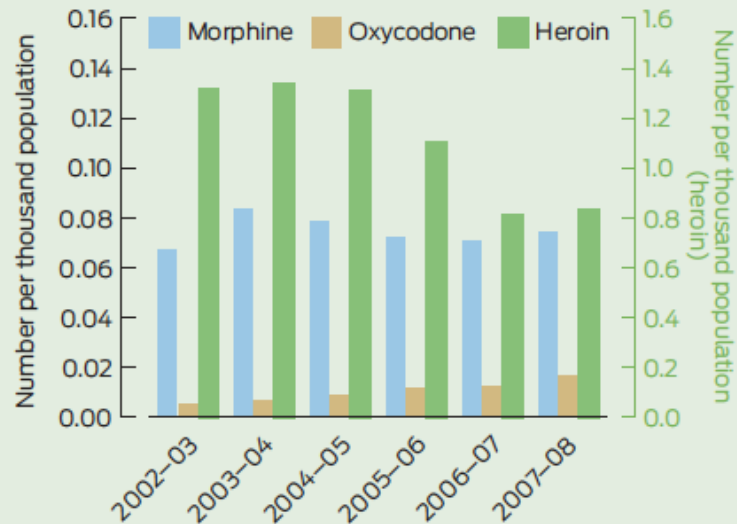
Hospital separations & AOD Tx

2 Indicators of harms associated with “other opioid”* and heroin use in Australia†

(A) Hospital separations for opioid poisoning



(B) Treatment episodes for problems related to morphine, oxycodone and heroin



*Morphine, oxycodone, and codeine. †Data obtained from the Australian Institute of Health and Welfare's Alcohol and Other Drug Treatment Services National Minimum Dataset and National Hospital Morbidity Database. ◆

Roxburgh et al. 2011 MJA

How effective is long term opioid therapy for non malignant pain?

- Limited evidence for benefit of opioids, particularly at doses above 90mg morphine equivalent
- Growing evidence for risk:
 - Addiction (5-20%)
 - toxic overdose
 - cognitive problems
 - Opioid induced hyperalgesia (OIH)

There are few treatments with so little evidence of effectiveness that kill so many people

Tom Frieden
NEJM 2016

MISUSE OF OTC MEDICATIONS

OTC medication abuse

- Dextromethorphan abuse¹
- Codeine abuse and dependence²
 - Combination analgesic/cough medicine abuse
- Other OTC medication misuse³ & tampering⁴
 - Cold Water Extraction
 - Homebake morphine/heroin
 - loperamide

1. Boyer *Ped Emerg Care* 2004; Miller *J Am Ac Child Adol Psych* 2005; Levine *Curr Opin Ped* 2007, www.dxmstories.com, www.dextromethorphan.org,
2. Myers et al. 2003 *SAMJ*, Gerostamoulas et al. 1996 *Am J Forens Med Path*, Murao et al. 2008 *Int Med*
3. McBride et al *Addiction* 2003; Fleming et al *Pharm World Sci* 2004
4. Fleming et al *Subs Use Misuse* 2003; Cone *Drug Alc Dep* 2006



Australia's love affair with OTC analgesia

- 1950s-70s: Australia leads in analgesic nephropathy with phenacetin combination products
 - Papillary necrosis
 - Chronic renal failure
 - Peptic ulcer
 - Chronic blood loss anaemia
 - Hypertension
 - Dialysis, renal transplant, death*

* 3,000 deaths reported in medical literature



NHDS 2016

- 4.8% pharmaceutical drug misuse
 - About two thirds of this is opioids
 - Most popular opioid: codeine (OTC and presc)
 - Then oxycodone, tramadol, morphine
- Pharmaceutical opioid use stable up to 2013
- Likely to change with codeine rescheduling
- Mean age mid 40s M=F
- OTC codeine analgesics=\$145m per year

THE SPECIAL CASE OF CODEINE

Codeine (methyImorphine)

- WHO analgesic ladder: “mild opioid”
- Codeine 60mg/paracetamol 1g only marginally better than paracetamol alone (NNT for 50% improvement of pain=6)
- Simple analgesia equally effective as low dose codeine

Toms L et al. Single dose oral paracetamol (acetaminophen) with codeine for postoperative pain in adults. Cochrane Database Syst Rev 2009 Jan 21;):CD001547

Problems of codeine in some populations

- Poor metabolisers vs ultra-rapid metabolisers
- Breastfeeding mothers
- Children

Early release, published at www.cmaj.ca on October 4, 2010. Subject to revision.

CMAJ

EDITORIAL

Has the time come to phase out codeine?

Codeine is, second only to morphine, the most widely used narcotic analgesic.¹ Health professionals and the public generally believe that codeine, used responsi-

potential risk associated with codeine must be mitigated. Clearly, pretesting all patients for genetic variants before recommending codeine would be expensive and impractical. A

Published studies of harm of OTC codeine analgesics

- Around 20 published reports since 2003
- 4 countries: UK, Ireland, Australia and New Zealand
- 250 cases reported

Published reports of harm: *OTC codeine-ibuprofen*

- Addiction
- Hypokalaemia: profound weakness, quadriplegia, life-threatening condition - ICU
- Rhabdomyolysis
- Renal tubular acidosis – renal failure
- Duodenal ulcer
- Gastric ulcer – perforated
- Opioid dependence
- Pyloric stenosis
- Profound iron deficiency anaemia
- Small bowel NSAID enteropathy, diaphragm disease, ulceration, iron deficiency anaemia, hypalbuminaemia

Case series (Frei et al. 2010, MJA)

- Hospital & AOD clinic presentations
- 27 cases of ibuprofen-codeine (200mg/12.8mg product)

MEDICINE AND THE COMMUNITY

Serious morbidity associated with misuse of over-the-counter codeine–ibuprofen analgesics: a series of 27 cases

Matthew Y Frei, Suzanne Nielsen, Malcolm DH Dobbin and Claire L Tobin

While extensive overseas evidence is accumulating about the non-medical use of prescription

ABSTRACT

Objective: To investigate morbidity related to misuse of over-the-counter (OTC) codeine–ibuprofen analgesics

Frei et al. 2010

- Most self initiated for pain
- “Morbidity of thirds”
 - 1/3 renal
 - 1/3 GI
 - 1/3 addiction
- Good response to buprenorphine-naloxone

It's all about the combination



Coroner

- *A timely reminder that the abuse of readily available or over-the-counter medication can be just as harmful as the abuse of illicit substances, and potentially even fatal*

TREATMENT OF CODEINE DEPENDENCE

OTC opioid users are different

- Older than typical opioid users
- More women
- Often no history of other drug use, minority inj opioid use
- Commenced treatment for painful condition
- Respond to buprenorphine Rx

Comparing treatment-seeking codeine users and strong opioid users. S Nielson, B Murnion, A Dunlop, L Degenhardt, D &A Review, May 2015

Australian Pharmacist March 2012. Nielsen, Tobin, Dobbin

Treatment of codeine dependence

- Good response to Suboxone pharmacotherapy program in this group
 - Cost competitive
 - Inconvenience competitive
 - Well-tolerated
- Risks of reduction/tapering of OTC analgesics

Upscheduling again?

- 7 years after 2010 upscheduling still a steady stream of cases
- Anecdotal reports of little change to availability
- Amounts now multiples of 20 rather than 24

Opioid maintenance therapy: methadone & buprenorphine

- Cost of OMT
- Stigma
- Restrictive programs
- Access to prescribers in Victoria





ABOUT DACAS

The Victorian Drug and Alcohol Clinical Advisory Service (DACAS) is a specialist telephone consultancy service that is free of charge for health and welfare professionals.

Consultation is provided by professional counsellors from the Turning Point Alcohol & Drug Centre and addiction medicine specialists. [Read More...](#)

VICTORIA'S ALCOHOL ACTION PLAN 2008-2013



VICTORIA'S ALCOHOL ACTION PLAN

'Restoring the balance'

QUICKLINKS

- ▶ [DACAS in Tasmania & Northern Territory](#)
- ▶ [Turning Point Alcohol & Drug Centre](#)
- ▶ [Drugs & Poisons Unit \(Dept. of Health\)](#)
- ▶ [Counselling Online](#)
- ▶ [Australian Drug Foundation](#)
- ▶ [Gambling Help Online](#)
- ▶ [General Practice Victoria \(GP Alcohol Education\)](#)



DACAS CONSULTANTS

Biographies of the addiction medicine specialists who consult for DACAS.



PORTAL TO ALCOHOL COUNSELLING & THERAPY

PACT is a referral service for GPs seeking counselling for patients with alcohol use problems.



TURNING POINT CLINIC

Turning Point provides a wide range of specialist treatment and support services to people affected by alcohol and drug use.

VICTORIA

24 hour phone service
for Health Professionals

1800 812 804

Anywhere in Victoria (toll free)

The future

- New formulations
 - Tamper/misuse deterrent forms
 - Depot buprenorphine & depot naltrexone
- Regulation, prosecutions & rescheduling
- Real time prescription monitoring

THANK YOU