DACRIN

Drug & Alcohol Clinical Research & Improvement Network

Webinar #1: Alcohol and Other Drug Assessment and Withdrawal

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

FACULTY OF HEALTH

www.newcastle.edu.au

Screening and Managing Substance Withdrawal

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Patterns of substance use

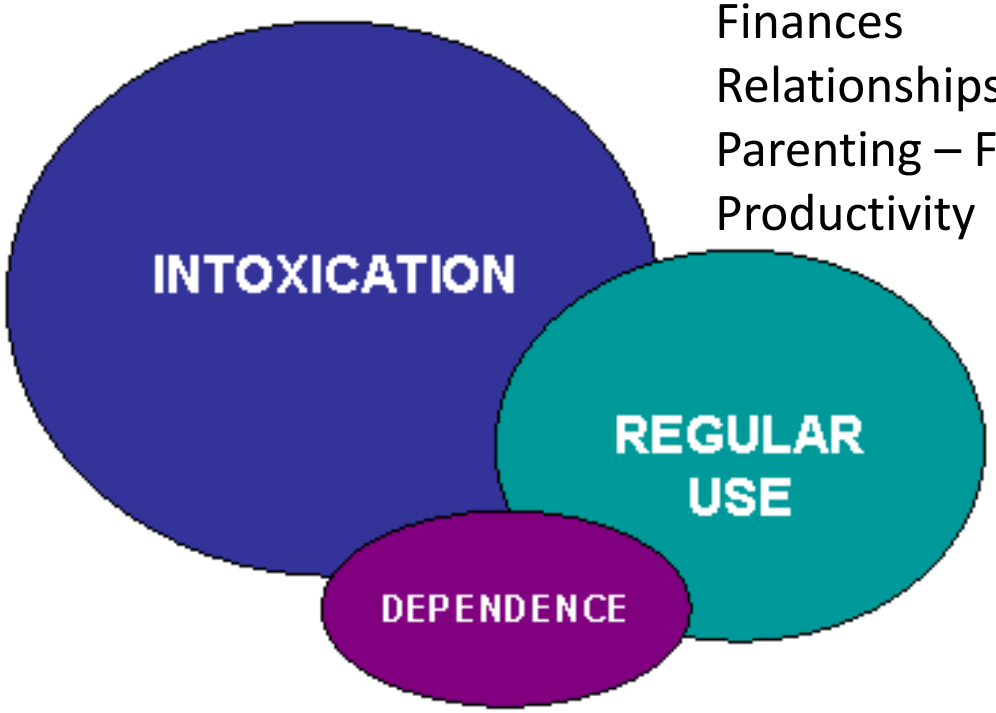
Use | Regular Use | Dependence

- Substance use can occur without harms
- Harms (i.e. problems) increase with more use
  - E.g. more times alcohol intoxicated, more likelihood of injury
  - But harms can occur with a single occasion of use
    - (e.g. schoolies week, alcohol harms)

Harms from substance use

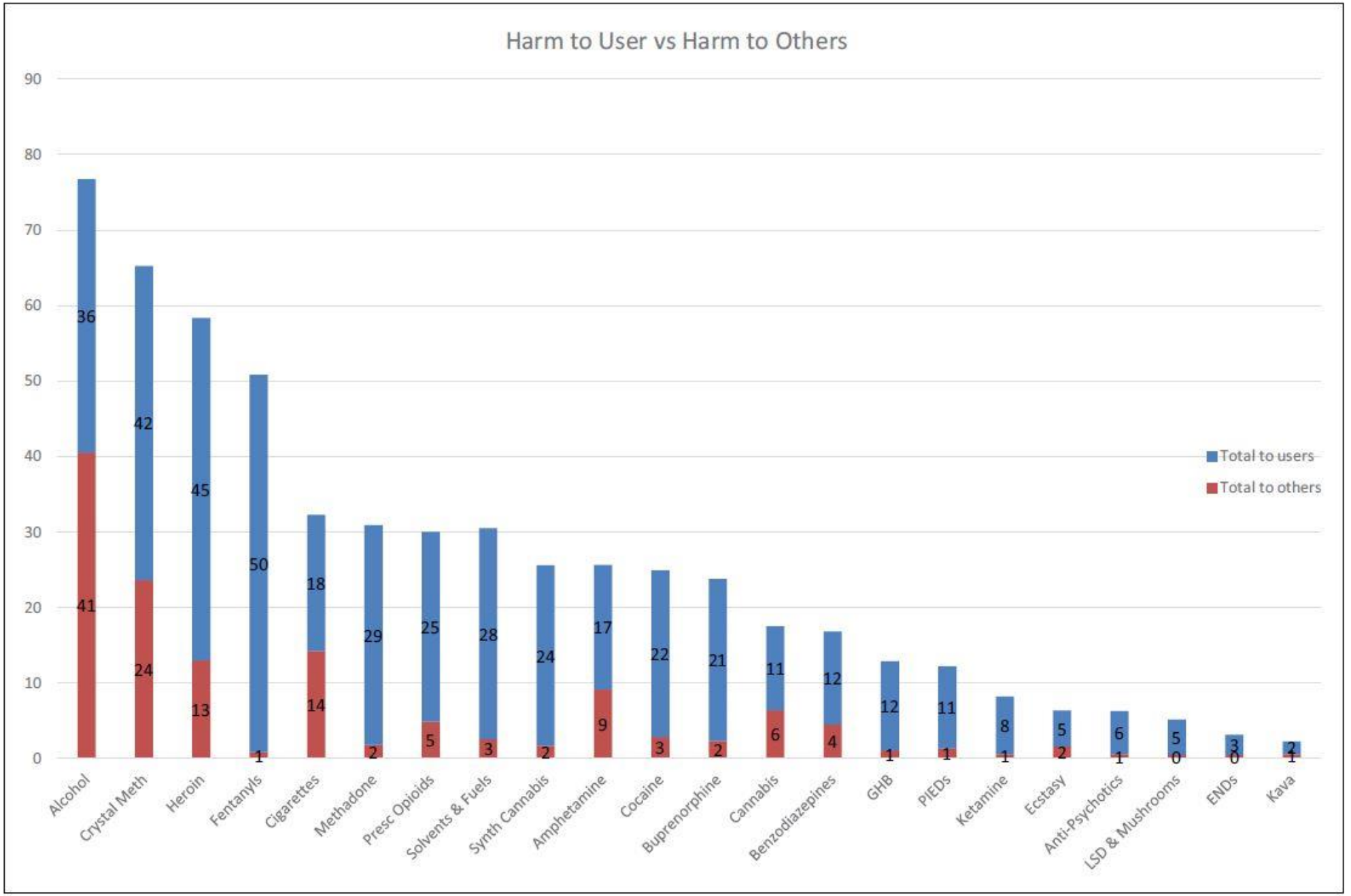
Bio-psycho-social health
Health (incl BBVs)
Finances
Relationships
Parenting – FACS
Productivity

Acute problems
Injuries
Accidents
Violence
Risk-behaviour
Overdose
Absenteeism



Loss of control
Preoccupation with substance use
Tolerance/withdrawal

from Thorley 1980



Bonomo, Y., 2019. *J Psychopharmacol*, *33*(7), 759-768

Dependence – what is it?

Lay definition = ‘addiction’ – can’t say no!

ICD 11 definition 2 of 3 in 12 month period

- Impaired control (may have cravings)
- Substance use is a priority in life (and may continue despite harms)
- Tolerance/withdrawal

DSM 5

- Substance use disorder – moderate or severe = dependence

Neurobiology of dependence

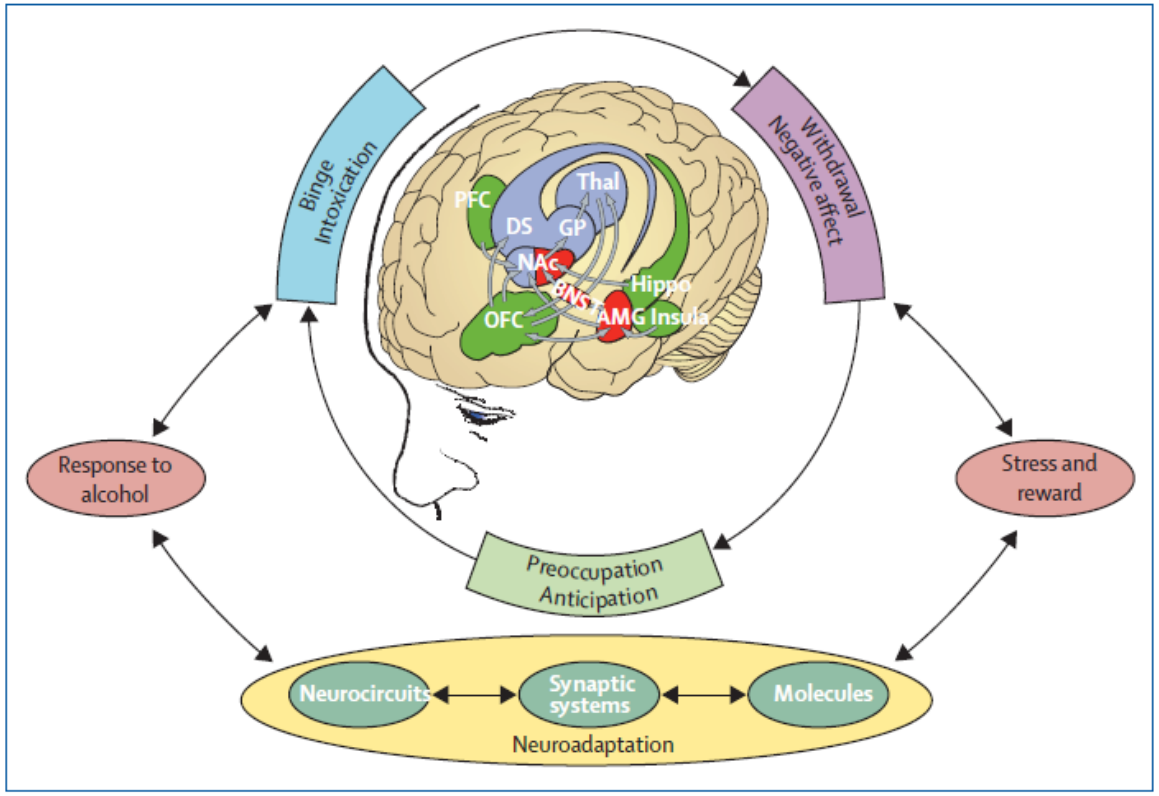


Figure: Conceptual framework for neurobiological bases of the transition to substance use disorders
PFC=prefrontal cortex. Thal=thalamus. DS=dorsal striatum. GP=globus pallidus. NAC=nucleus accumbens. BNST=basal nucleus of the stria terminalis. Hippo=hippocampus. OFC=orbitofrontal cortex. AMG=amygdala. Insula=insular cortex.

- Key processes include:
  - Binge/Intoxication
  - Withdrawal – negative affect
  - Preoccupation/anticipation

Koob G, Volkow N Lancet Psych 2015

Neuroadaptation

- The CNS adapts to the chronic presence of a psychoactive drug, so that the person can function relatively normally when intoxicated (tolerance)
- Involves a variety of receptors/pathways

- Need higher doses of the drug to get the desired effect (tolerance)
- When substance use ceases, the person is then left in a state of imbalance (withdrawal)
  - Sympathetic drive: Pulse ↑, BP ↑, anxiety ↑, sleep ↓ (+ cravings)

Drug & alcohol treatment

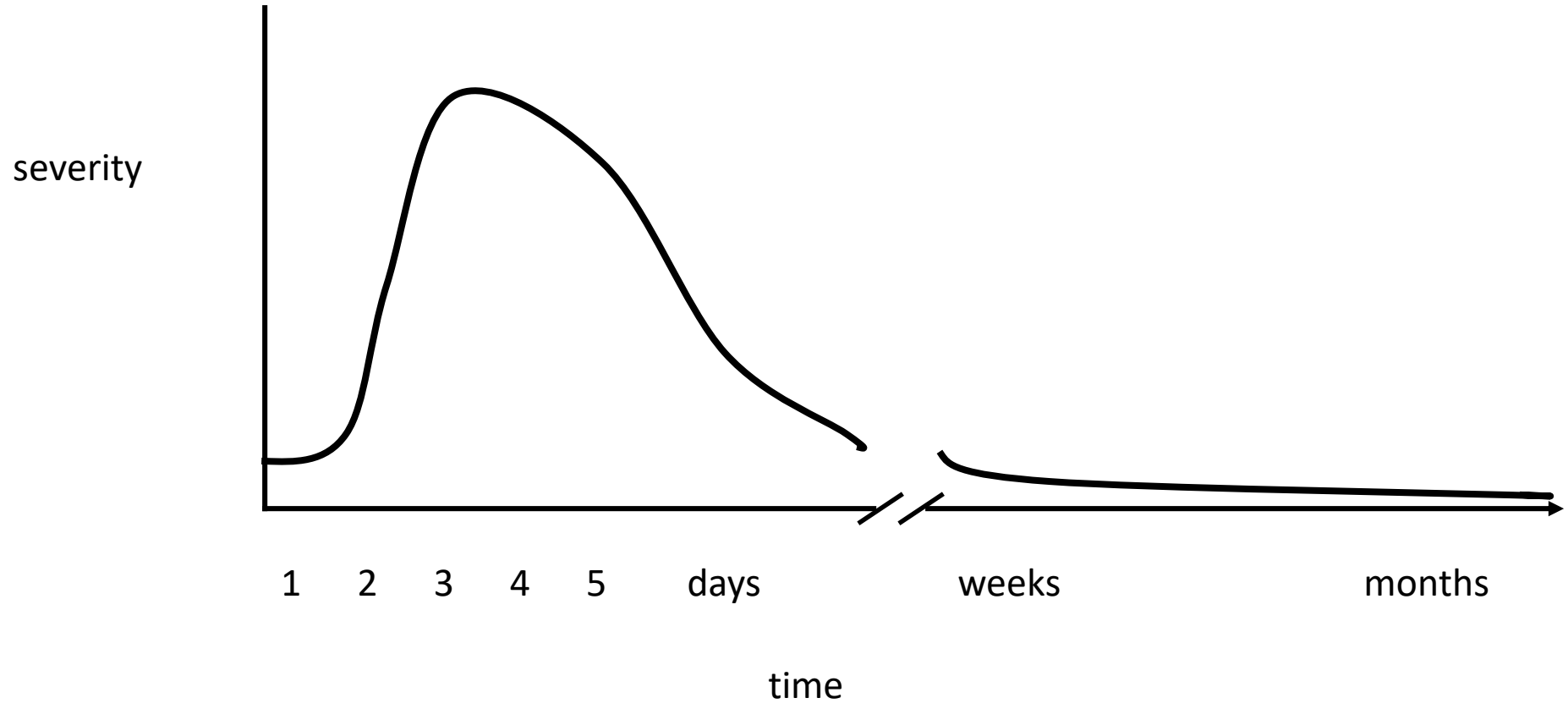
Problem	Response
Harmful use	Brief intervention (counselling e.g. motivational interviewing)
Dependence	• Withdrawal treatment & ongoing treatment (e.g. naltrexone or disulfiram for alcohol) • Medication based therapy (e.g. opiate treatment, nicotine replacement)

Withdrawal syndromes recognised for

- Alcohol
- Opioids
- Benzodiazepines
- Cannabis
- Amphetamines
- Cocaine
- Tobacco

- Not hallucinogens (e.g. ‘magic’ mushrooms, LSD)

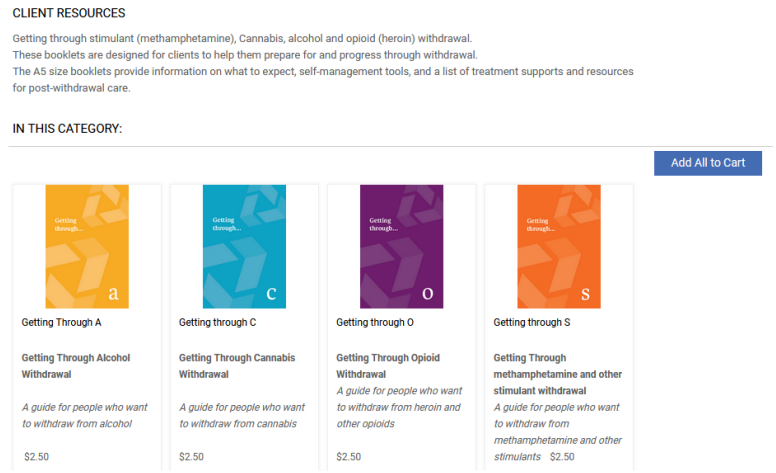
Substance withdrawal – time course



Patient education regarding withdrawal

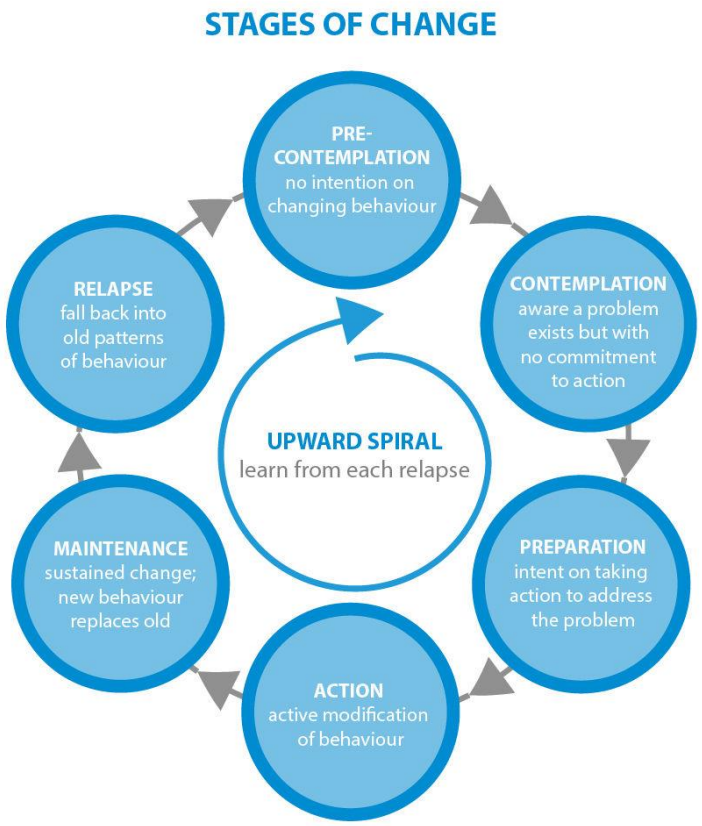
"Withdrawal counselling"

- Patient experience – expectations/ability to manage distress
- Better informed patients more likely to manage distress
- Pre-existing mental health symptoms – may get worse
- Options:
  - Telephone support: ADIS
  - On line support: www.counsellingonline.org.au
  - Patient education booklets exist (e.g. Turning Point)



https://www.turningpoint.org.au/
https://www.counsellingonline.org.au/sites/default/files/inline-files/Amphetamine_wdl.pdf

Stage of change model



- Counselling
  - Help people move through stages of change
  - E.g. motivational interviewing, cognitive behavioural therapy

Stage of Change

Prochazka and DiClemente 1991

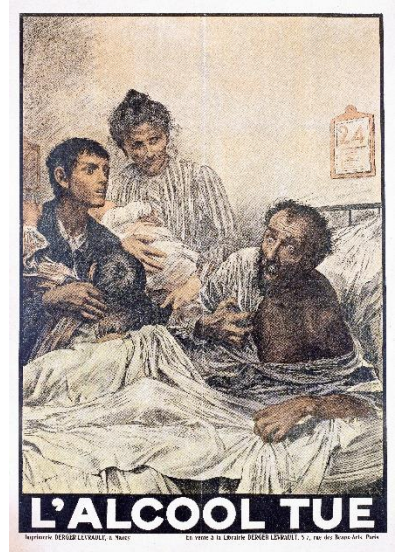
Screening for dependence/risk of withdrawal

- Question 1 – daily use?
  - No = not likely to have a significant withdrawal syndrome
  - Yes
    - Alcohol 8+ standard drinks per day – increased threshold
    - Other drugs – frequency of use per day (e.g. morning use?)
- Question 2 – what happens when you don't drink/use substance?
  - Onset of withdrawal syndrome
- Question 3 – history complicated withdrawal?
  - Alcohol – withdrawal seizures, severe withdrawal/withdrawal delirium
  - Benzodiazepines - withdrawal seizures

Goals of withdrawal treatment

1. Assist patients reduce/stop substance use
2. Prevent serious complications (e.g. seizures, severe alcohol withdrawal)
3. Link to psychosocial support (e.g. counselling, other services)
4. Provide links to ongoing treatment (note relapse – common outcome)

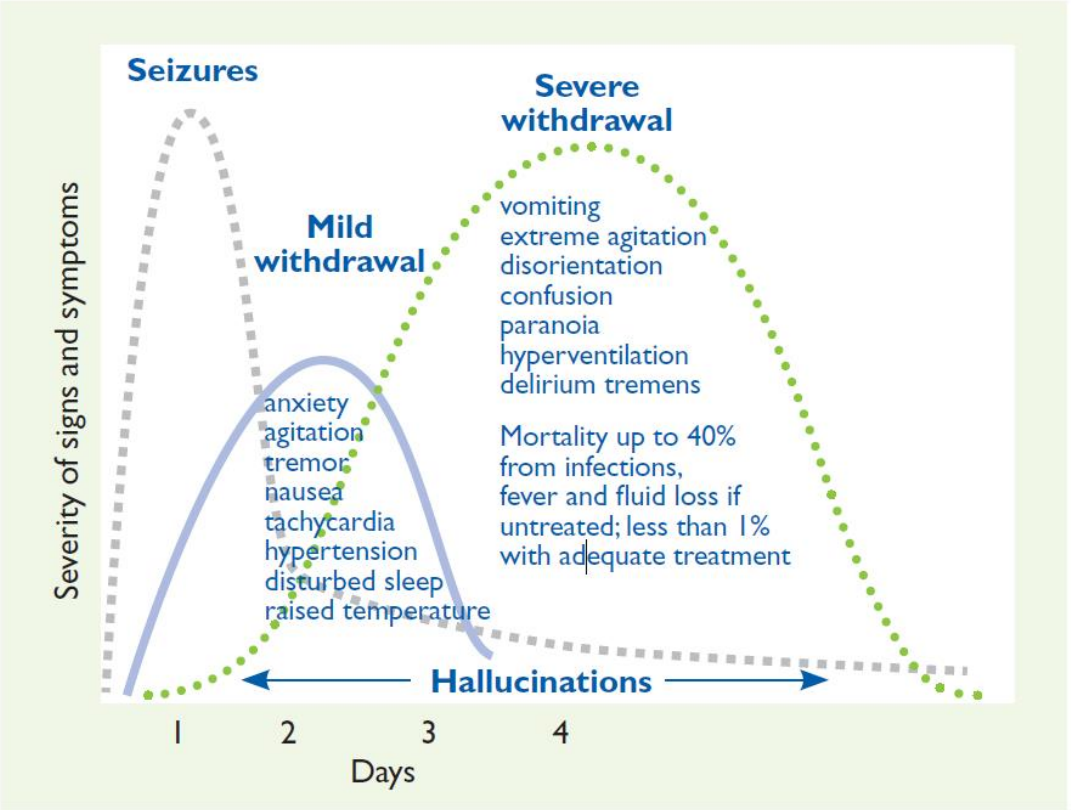
Alcohol withdrawal



- Clinical features:
  - Tremor ('grog shakes'), nausea, vomiting, sweats, headache,
  - Severe - sensory disturbances (e.g. tactile - bugs crawling all over me; visual – pink elephants; auditory - frightening)
  - Anxiety/agitation, insomnia, alcohol cravings, Pulse ↑, BP ↑
- GP Treatment:
  - Withdrawal counselling
  - diazepam e.g. 5-10mg qid 3/7 then decrease (risk of dependence)
  - Prevent Wernicke-Korsakoff syndrome – oral thiamine 100mg daily (peranteral?)
  - Follow-up counselling + naltrexone/disulfiram/acamprosate

Timeframe for withdrawal

Figure 5.1: Alcohol withdrawal syndrome progression



Haber, P., Lintzeris, N., Proude, E., & Lopatko, O. (2009). Guidelines for the treatment of alcohol problems.

Opioid withdrawal

- Clinical features
  - Flu-like illness: aches, pains, sweating, nausea/vomiting, diarrhoea, hot/cold flushes
  - Mydriasis, piloerection (goodbumps), muscle twitches, yawning, lacrimation
  - Anxiety/agitation, insomnia, opioid cravings, Pulse ↑, BP ↑
  - Return of pain? (e.g. dental caries/back pain)
- GP treatment
  - Symptomatic medication (not very effective: NSAID, anti-emetic, anti-diarrhoeal, BZDs?)
  - Recommend naloxone – relapse
  - Optimal – short course buprenorphine (e.g. 4,6,8,6,4 mg sublingual daily)
  - https://www.health.nsw.gov.au/pharmaceutical/doctors/Pages/otp-medical-practitioners.aspx

Naloxone

- Current trial – till June 2021
- Available ‘free’ to people at risk of witnessing overdose
- No ID required
- ~ 100 pharmacies across Hunter New England + Central Coast region

https://yourroom.health.nsw.gov.au/getting-help/Pages/Naloxone.aspx

Cannabis withdrawal

- Clinical features
  - Low mood, mood swings (aggression), sweating, headaches, stomach pains, nausea, decreased appetite, strange dreams
  - Anxiety/agitation, insomnia, cannabis cravings
  - Timeframe 1-2 weeks
- GP treatment
  - Withdrawal counselling – note relapse
  - Role of medication? Consider short term BZDs (e.g. temazepam 20mg nocte, diazepam 10mg nocte)

Benzodiazepine withdrawal

- Clinical features
  - Anxiety/agitation, insomnia
  - Panic attacks, tremors, sweats, nausea, headache, muscle pain
  - Perceptual changes: e.g. tinnitus, blurred vision, numbness
- GP treatment
  - Stabilisation and gradual reduction
    - E.g. 5-10% per week – month
    - More possible with My Health Record – will become more with Real Time Rx Monitoring
  - Withdrawal counselling

Amphetamine withdrawal

- Clinical features
  - 2 Phases:
    - Amphetamine hangover: sleep+++, loss of appetite
    - Irritability, muscle twitching, aches & pains, vivid dreams, low moods
  - Anxiety/agitation, insomnia, amphetamine cravings (+++)
  - Timeframe – several weeks
- GP treatment
  - Withdrawal counselling – note relapse
  - Role of medication? Consider short term BZDs (e.g. temazepam 20mg nocte, diazepam 10mg nocte)

Withdrawal setting

Table 5.3: Admission criteria for different withdrawal settings

	Ambulatory	Community residential	Inpatient hospital
Predicted alcohol withdrawal severity	Mild–moderate	Moderate–severe	Moderate–severe
Likelihood of severe withdrawal complications	No	Withdrawal complications (seizures, hallucinations)	Withdrawal complications (delirium, unclear cause seizures)
Medical or psychiatric comorbidity	Minor comorbidity	Minor comorbidity	Significant comorbidity
Other substance use	No heavy drug use	Heavy or unstable use of other drugs	–
Social environment	Alcohol-free 'home' Daily monitoring by reliable support people Good access to health care service	Unsupportive home environment	–
Previous attempts	–	Repeated failure at ambulatory withdrawal	–

Haber, P., Lintzeris, N., Proude, E., & Lopatko, O. (2009). Guidelines for the treatment of alcohol problems.

Summary

- Regular use – e.g. daily – risk of withdrawal
- Must be dependent to experience withdrawal
- Relapse is a common outcome – preparation for next attempt
- Caution re iatrogenic dependence
- Assess suitability for withdrawal – caution re complicated withdrawal
- Referral options:
  - Calvary Mater Alcohol & Drug Service 4921 1211
  - HNE D&A intake 1300 660 059
  - Central Coast 4394 4880

THE UNIVERSITY OF NEWCASTLE

Hunter New England
COMMUNITY
HEALTHPATHWAYS

Log in = hnehealth
Password = p1thw1ys

NSW GOVERNMENT Health
Hunter New England
Local Health District

Alcohol and Other Drug Assessment and Withdrawal – HNE HealthPathways

- Alcohol Brief Intervention
  https://hne.communityhealthpathways.org/16539.htm
- Alcohol Withdrawal
  https://hne.communityhealthpathways.org/89515.htm
- Benzodiazepine Withdrawal
  https://hne.communityhealthpathways.org/110568.htm
- Cannabis Withdrawal
  https://hne.communityhealthpathways.org/89864.htm
- Psychostimulant Withdrawal
  https://hne.communityhealthpathways.org/192335.htm
- Opioid Agonist Treatment (OAT) - methadone and buprenorphine
  https://hne.communityhealthpathways.org/63944.htm
- Drug and Alcohol Referrals
  https://hne.communityhealthpathways.org/108600.htm

Community HealthPathways

Hunter New England