SUBSTANCE USE DISORDERS

CADS Psychiatrists/
Medical Officers

Medical Student
Teaching 2012

Today's Agenda

- Background
- Effects of Alcohol and Drugs
- Assessment & Engagement
- Management
  - Brief interventions
  - More intensive treatments
  - Harm reduction
  - Motivational interviewing
  - Medications/detoxification
  - Relapse prevention
  - Other treatments

DSM-IV Diagnoses:

- Substance **use** disorders:
  - Abuse and Dependence

- Substance-**induced** disorders:
  - Intoxication, withdrawal
  - Anxiety, amnestic, dementia, mood, psychotic, sexual dysfunction, sleep…

Substance Abuse (DSM-IV)

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by 1 of the following (in 12 months):

- Role Impairment (e.g. failed work or home obligations)
- Hazardous use (e.g. Driving while intoxicated)
- Legal problems related to alcohol use
- Social or interpersonal problems due to alcohol

Substance Dependence (DSM-IV)

(Maladaptive pattern, CSI/distress, **3** in 12/12):

- Tolerance (increased amt, or getting less effect)
- Withdrawal syndrome or use to avoid Sx
- Using more than intended (amount or time)
- Unsuccessful attempts to cut down on use
- Much time spent in obtaining, using, recovering
- Social/work/hobbies given up/reduced
- Use continued despite physical or psychological consequences

Specify +/- physiological dependence (T or W)

Epidemiology

- Males use more than females although differences in genders is lessening
- The highest rates of substance abuse and dependence in community studies in Australia and NZ are found in 18 to 25 year olds
- 1 year prevalence of any substance abuse or dependence is 7.7% with a male 2:1 preponderance
- Alcohol abuse/dependence dominate however other major drugs of abuse include cannabis and increasingly amphetamines

Te Rau Hinegaro
(NZ Mental Health Survey 2006)

- Any substance use disorder
  - Lifetime prevalence 12.3%
  - 1 year prevalence 3.5%
  - 1 month prevalence 1.5%

Te Rau Hinegaro

- 12 month prevalence of substance use disorders
  - Any substance disorder 3.5%
  - Alcohol abuse 2.6 %
  - Alcohol dependence 1.3 %
  - Drug abuse 1.2 %
    - Cannabis abuse 0.9 %
  - Drug dependence 0.7 %
    - Cannabis dependence 0.5 %

Substances in DSM-IV:

- Alcohol
- Amphetamine
- Caffeine
- Cannabis
- Cocaine
- Hallucinogen
- Inhalant
- Nicotine
- Opioid
- Phenylcyclidine
- Sedative, hypnotic or anxiolytic

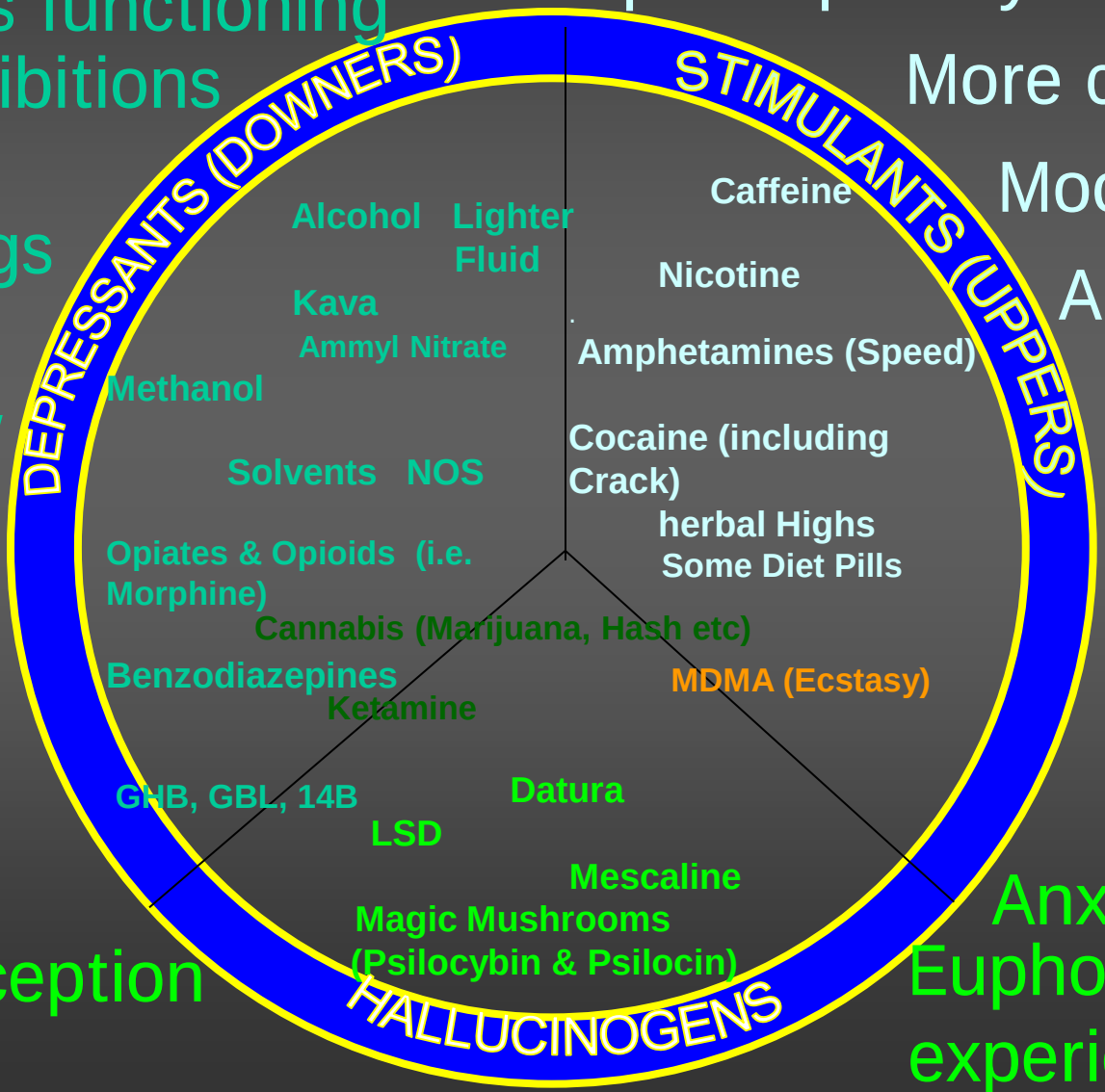
HIGHS/LOWS AND SIDE EFFECTS

Slow body's functioning
Reduce inhibitions
Relaxed
Mood swings
Impaired movement/ thinking
Possible death

Speedup body's functioning
More confident
Mood swings
Anxiety
Depression
Seizures

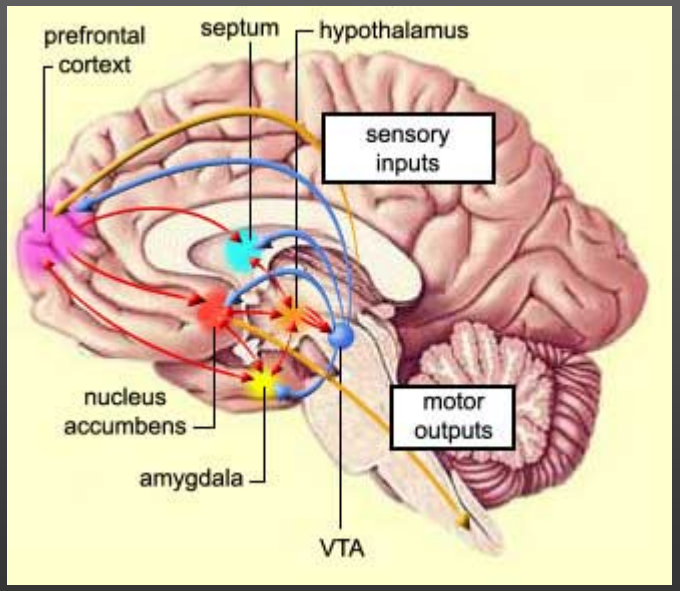
Paranoia
Unreal perception

Anxiety
Euphoric mystical experiences



Biology of Addiction

- Almost all drugs of abuse have one final common pathway
- Release of dopamine in the nucleus accumbens leads to feeling of well-being or a high
- Repetition of use leads to reinforcement in these pathways
- Cues to using (such as thinking about use or seeing reminders) leads to similar release of dopamine
- This leads to further reinforcement and often relapse in those who are dependent



Assessment and engagement

Assessment

- What? – alcohol, cannabis, party drugs, solvents
- How much?
  - Past use: age of first use, use over time
  - Current use: where, who, when, amount (30-day check), typical day, route, effects, why, abstinence, screening instruments
- Abuse, dependence or any induced disorders
- Identify co-morbidity
- Risk issues (who with, bingeing, route, sex, driving etc)
- Motivation to change

Assessment

- Understand substance use within the context of person's life
- What? – alcohol, cannabis, party drugs, solvents
- How much? – amount, potency, frequency, bingeing
- When? – time of day, week, year
- How taken? – drink, eat, smoke, snort, inject
- Effects? – high, calming, 'out of it', alertness
- Why taking? – stress, mood, a buzz, boredom, hooked
- Where? – school, home, parties, friend's place, work
- With whom? – alone, partner, mates, family

Comorbidity

- Co-morbidity is common
- Around 40% of patients with serious mental illness will have a substance use problem
- Around 60% of those with substance use problems will have mental ill health
- Mental illness/symptoms more often precedes serious substance problems (although can follow or co-occur)
- Personality and mood disorders most commonly seen
- Physical problems also common: 50% of general hospital admissions related to alcohol (ALAC)

Engagement

- People are likely to be *ambivalent* about their substance use
    - Like and dislike aspects of it
    - Want to change some behaviour but keep other behaviours
    - Deny problems associated with use
- Their expectation is likely to be that you will tell them they have a problem and that they should stop
- Stressing confidentiality is an important part of getting people to talk about their substance use

Talking about use

- Open and non-judgmental approach
- *The decisional balance*
  - What are the good things about using?
  - What are the less good things about using?
- *Typical session/day*
  - Tell me about a usual day/session and how your drug use fits into this?
- *Exploring concerns*
  - Does this stuff ever make you worried?
- *Looking backwards and forward*
  - How are things now, compared to then?
  - How would you like things to be?

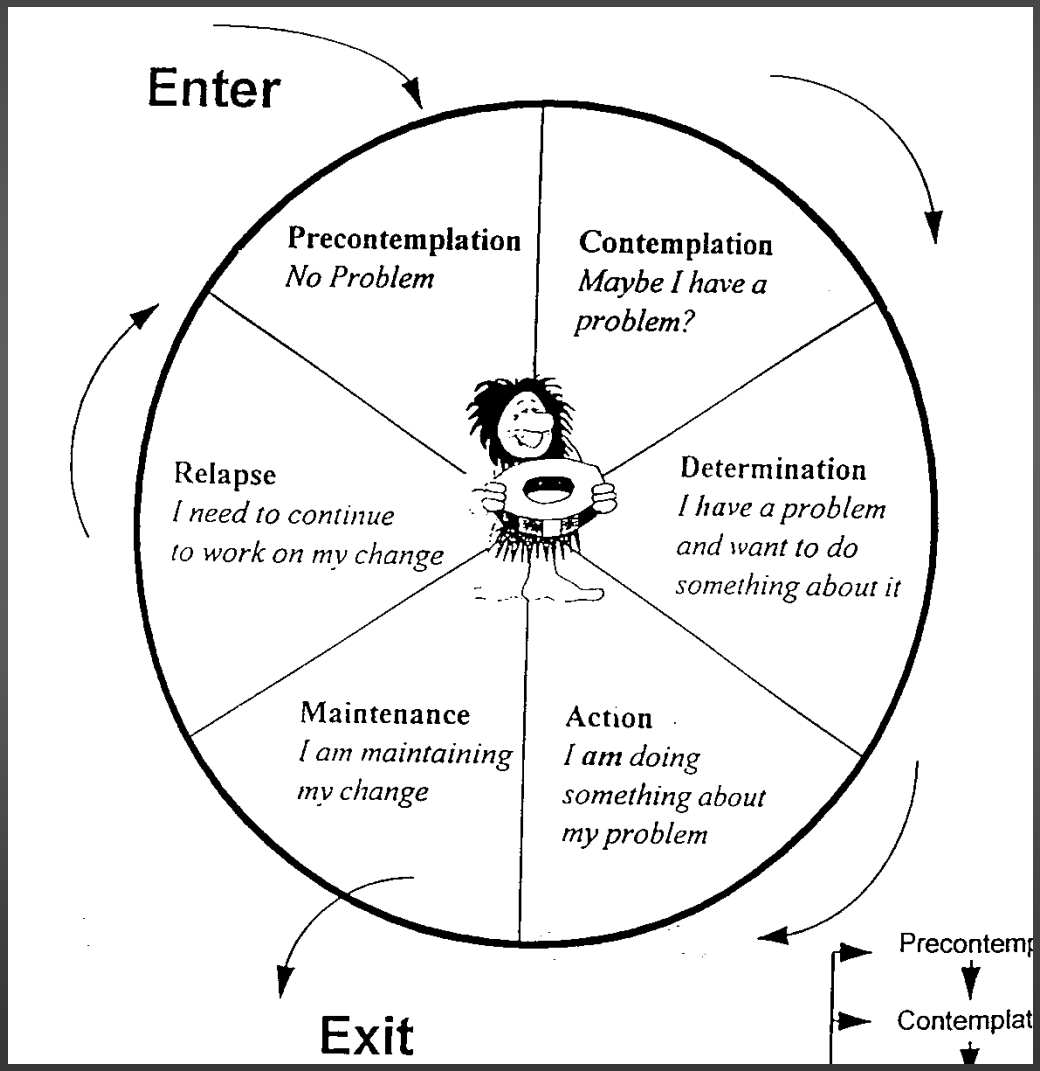
Engagement and Motivation

- How you approach and help the patient to change depends on their *motivation*
- It's important to establish what their motivation is early on and be aware that it changes
- Change in motivation seldom occurs suddenly - rather people move through stages
- Prochaska and DiClemente's model -'Stages of change' is useful to conceptualise people's motivation

Prochaska and DiClemente's

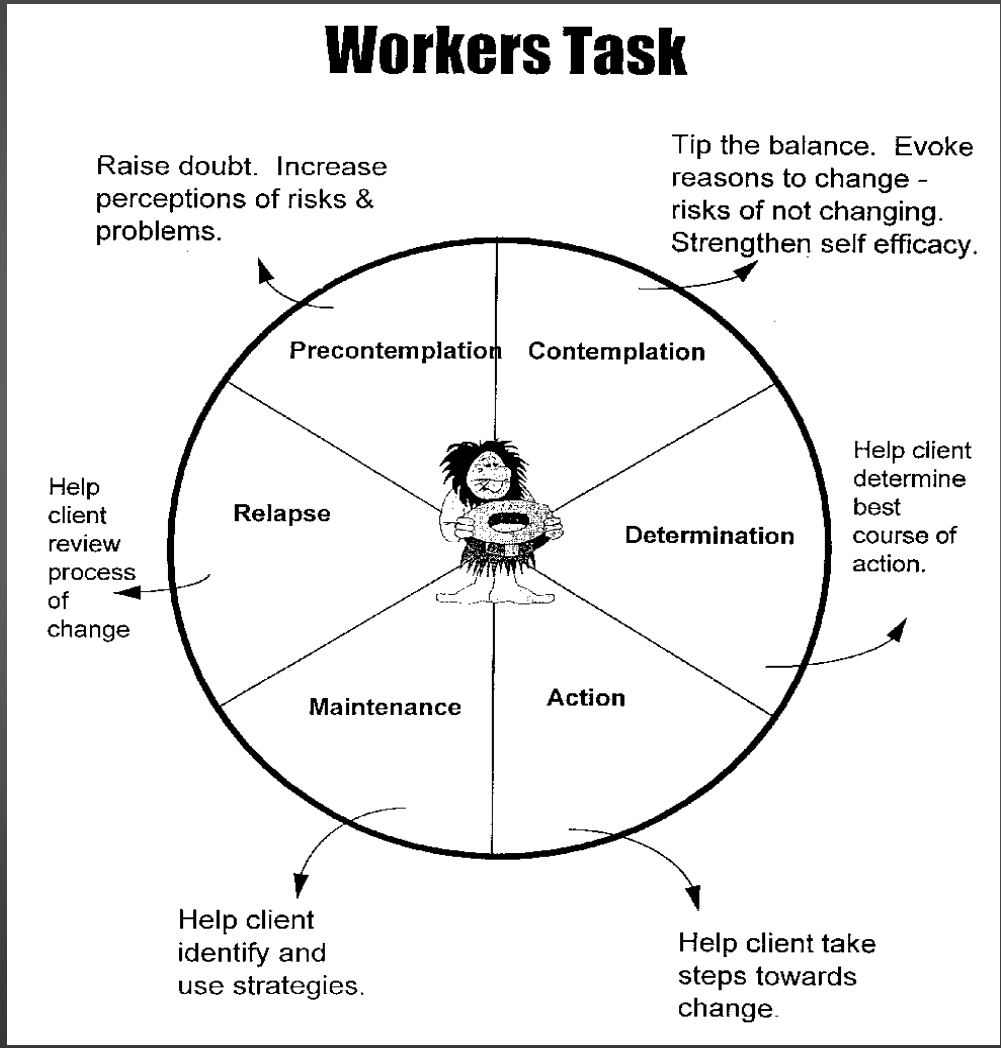
STAGES OF CHANGE

- Precontemplation
- Contemplation
- Determination
- Action
- Maintenance
- Relapse



Stages of change

- Raise doubt
- Tip the balance
- Determine course of action
- Assist client with change
- Assist client in maintaining change



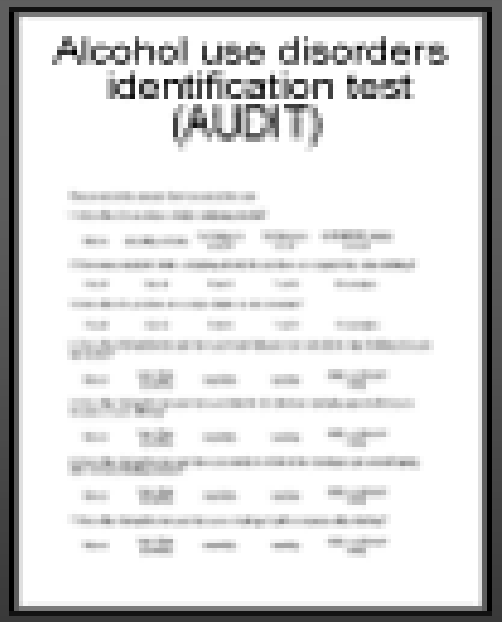
Management of Substance Use Disorders

Brief Interventions

- Efficacy of brief interventions (in less severe SUD) is equivalent to that of long term treatment
- 5 - 30 minutes of education about substance use targeting harmful effects and impact on the individual
  - Screen for problem use
  - Advise to reduce use to safe levels
  - Advise on harm minimisation strategies
  - Involves personally linking information to current symptoms/problems
  - Provision of self help materials, resources etc that they can take away
  - Further education

Screening instruments

- Common example is AUDIT screen for alcohol
- The Audit asks for answers to 10 multi-choice questions
- Final score indicates safe, hazardous and harmful, dependent use
- Can be used to begin a brief intervention
- Other screens: CAGE (dependence),
  Leeds Dependence Questionnaire (LDQ),
  SDS (Severity of Dependence Scales)


Alcohol use disorders identification test (AUDIT)

Biomarkers also useful – GGT, MCV,
AST:ALT ratio (>2:1), CDT

Brief Interventions

- FRAMES
  - Feedback about risk
  - Responsibility is with the individual
  - Advise and educate
  - Menu of strategies and options (provide a)
  - Empathic approach is essential
  - Self-efficacy and optimism is emphasised

More intensive AOD interventions

- Biological
- Psychological
- Family
- Social
- Cultural
- Safety
- Stabilisation
- Short term
- Long term

AOD Interventions

- Individual therapy
  - Supportive counselling
  - Motivational interviewing
  - Cognitive behaviour therapy
  - Relapse prevention
  - Medication
- Family
  - Significant other counselling
  - Family involvement (in individual therapy)
  - Couple therapy
  - Family therapy

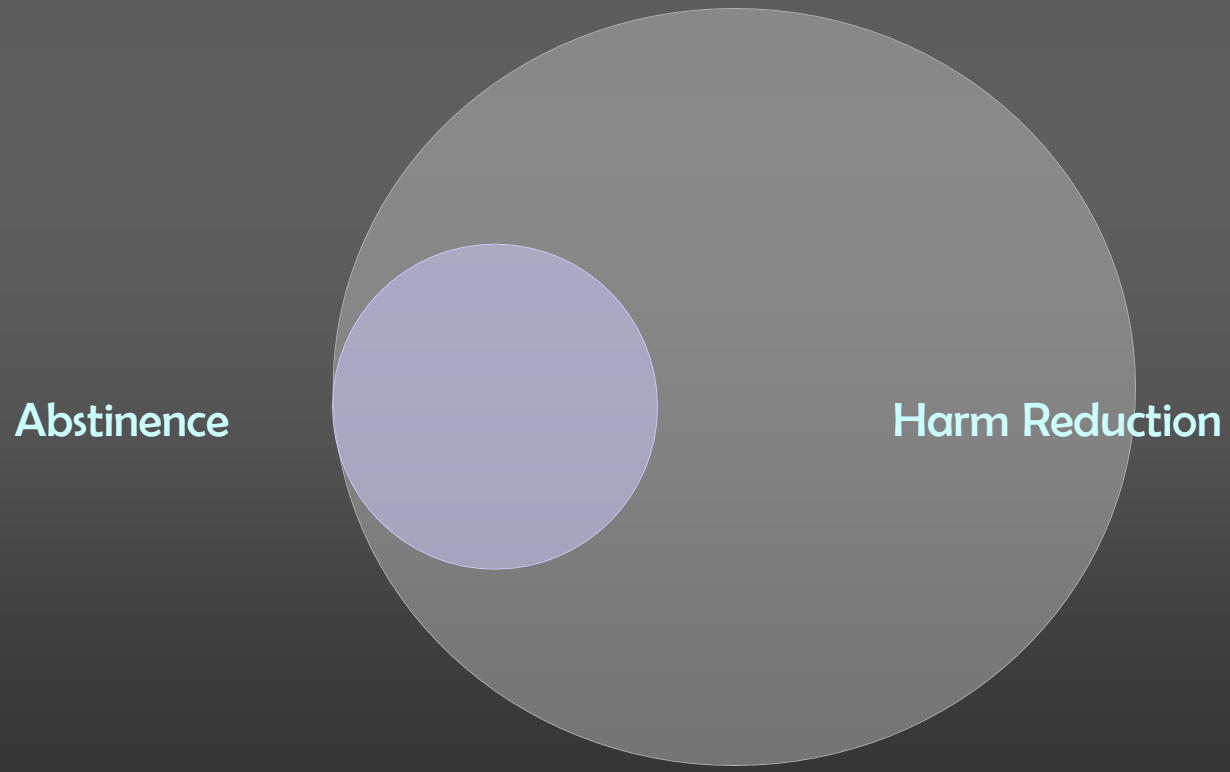
AOD Interventions

- Social
  - Social behaviour network therapy (SBNT)
  - Community programmes
- Group therapy
  - 12 step approaches, AA, NA, Al-Anon
  - Day programs
  - Outpatient groups (psychoeducation, support)
- Residential / Rehabilitation
  - Therapeutic communities (Odyssey, Higher Ground)
  - Shorter term residential rehabilitation (The Bridge)

Two Types of Treatment

- Biological
  - Medication, detoxification, abstinence
- Psychological and Social
  - Therapy/counselling, AA/NA, residential programmes

Two Philosophies of Treatment



Treatment - philosophies

Abstinence based models

- US based
- Often view drug problems as 'disease' and therefore abstinence only realistic goal
- AA, 12 step approaches
- Ties in with legally restrictive drug policy

Harm Reduction models

- European/Australasian
- Wider conception of AoD problems, therefore more flexible goals
- Wider range of approaches: substitute prescribing, brief interventions, needle exchange
- Ties in with more relaxed drug policy

12 step and Residential

- 12-step treatment is an abstinence based approach developed by Alcoholics Anonymous
- A strongly supportive group approach
- Individual support from a sponsor
- Strong spiritual/moral approach ‘pathway’ to recovery
- It is commonly the basis of residential treatment

Harm reduction

- Safety planning
  - Reducing levels of use
    - safe levels of use, number of occasions of use, postponing, potency of substance used
  - Changing to safer mode of use
  - Education around ⇓ health risks
  - Environmental factors - planning ahead
  - Legal
- Decrease unsafe practices
  - Driving
  - Safe sex
  - Needle Exchange

Harm reduction

- Education
  - About substances and their impact
  - About addiction and its implications
  - About treatment
- Treat and manage co-existing/complications
  - Medical
  - Psychiatric
- Targeted specialist interventions
  - Methadone/benzodiazepine maintenance
  - Other – wet hostels,

Motivational Interviewing

- A client-centered therapy style for eliciting behavior change by helping clients to explore and resolve ambivalence *(Rollnick, S., & Miller, W.R. 1995)*
- Address ambivalence about changing
  - Looking at good things and less good things
- Look at how current behaviour might conflict with goals
  - Develop and amplify discrepancy
- Think about and express reasons for and against change
  - Tipping the decisional balance
- Look at how things are changing and build self efficacy
  - Scaling, client give voice to own change

Motivational interviewing

Miller and Rollnick's five principles of "Motivational Interviewing"

- Express empathy
  - Acceptance, don't judge, use reflective listening
- Develop discrepancy
  - Awareness of consequences, amplify discrepancy
- Avoid argument
  - Confrontation $\Rightarrow$ defensiveness & resistance
- Roll with resistance
  - Emphasise personal choice & control, shift focus
- Support self efficacy
  - Self-responsibility, optimism, belief in the individuals capacity to change

Motivational interviewing

Micro-skills and strategies in "Motivational Interviewing"

- Open-ended questions
  - What?, How? & Why? questions
- Reflective listening
  - Repeating back the clients words (or similar)
- Affirming
  - Statements of appreciation and understanding
- Summarising
  - Linking themes and areas of discussion
- Eliciting self-motivating statements
  - 'Maybe I have been using too much'
  - 'I am worried about the risk of getting an STD'
  - 'I've got to do something about this'

Two patients

JOHN

Alcohol dependent

JANE

Morphine dependent

IV User

Medication

JOHN

Detoxification

- Diazepam, Thiamine

Relapse Prevention

- Naltrexone
- Disulfiram (antabuse)

JANE

Substitution Rx

- Methadone
- Buprenorphine

Detoxification

- Detoxification
  - Inpatient detoxification
    - Alcohol
    - Opiates
    - Poor physical health / nutrition / mental health issues
  - Home detoxification
    - Less severe addictions
    - Good social support
    - Motivated to change

Alcohol detoxification

- See hospital protocols on the Intranet
- Diazepam - monitor using AWS or CIWA and physical observations - give diazepam doses sufficient to minimise autonomic symptoms/signs and anxiety.
  N.B. Important to prevent development of delirium tremens.
- Thiamine – 200mg daily im/iv for 3 days (longer if significant neurological deficit) then 50mg qid orally. (Or see updated guidelines on Intranet.)

Medications for relapse prevention

- Naltrexone – oral opioid antagonist. Reduces alcohol craving and subjective "high" from alcohol use resulting in reduction in rate of relapse and in drinking days. (Subsidised treatment available only in specialist programme.)
- Disulfiram – inhibits aldehyde dehydrogenase. Consumption of alcohol results in flushing, increased PR, palpitations & reduced BP followed by nausea, vomiting, SOB, sweating lasting approx 30 mins. Risk of CV collapse/convulsions if severe.

Medication for Substitution Treatment

Opioid substitution

- Methadone – long acting full opioid agonist with half life 15-60 hour (mean 22) (oral liquid formulation used)
- Buprenorphine – partial opioid agonist with long half life (20-73 hrs) that binds tightly with opioid receptors => prolonged action (sublingual)

Benzodiazepine substitution

- Diazepam (occas clonazepam)

Stimulant substitution

- Dexamphetamine, methylphenidate – not yet supported by research

Problem…

- The medication (e.g. naltrexone) isn't holding John. What other psychological treatments might aid him in cutting down and abstinence:
  - Relapse prevention and CBT
  - 12 step
  - Residential

Relapse Prevention

- Discover and examine those things that increase & decrease
  - risk of using substances
  - problem behaviours associated with substance use
  - ability to change substance use
- Enhance commitment to change
- Clarify causes and potential causes of relapse
- Introduce and record strategies to prepare for & prevent relapse
- Monitor outcome and enhance social supports
- Remain optimistic and encourage self-efficacy

RP strategies

- Monitoring, diary keeping etc.
- Education
- Future perspectives, goal planning
- Social networks and changing these
- Drink and drug refusal skills
- Social skills, communication skills, assertiveness, problem solving
- CBT interventions

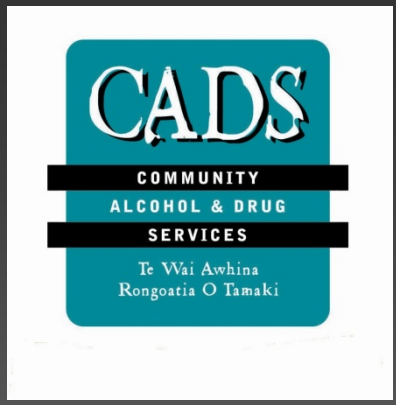
Relapse Prevention: Psychological Strategies

- Cognitive Behavioural Therapy
- Main Idea: certain beliefs and behaviours increase the chances of relapse.
  - Thought: 'I need a drink to help me relax.'
  - Learned behaviour: drinking in response to stress
- Focuses on teaching methods of coping with high risk situations

Intervention Options

- Consultation with specialist service - CADS
- Specialist outpatient treatment – CADS, Salvation Army
- Residential programmes – Odyssey House, Higher Ground, Salvation Army Bridge programme
- Inpatient/community detox - CADS
- Methadone/buprenorphine maintenance - CADS
- Family therapy - Private
- AA/NA groups

CADS



Community Alcohol & Drug Services

- CADS counselling services (individual & group) – including Maori, Pacific, Asian, Gay and Lesbian and 65+ services
- Community and inpatient detoxification
- Opioid substitution service
- Specialist Youth service (Altered High)
- Dual Diagnosis service
- Pregnancy and Parental service