ADDICTION IN GENERAL PRACTICE

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GPCME, Rotorua, 12 June 2009
MANAGING ADDICTIONS IN GENERAL PRACTICE

- Pleasure centre
- Addiction defined
- Screening
- Brief interventions
- Disulfiram
- Naltrexone
- Buprenorphine/Naloxone [Suboxone]
- Controlled drugs
- Food addiction
### Causes of Death Classified by Risk and Condition, NZ 1997

Tobias & Turley, Aust NZ J Public Health 2005

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary factors</td>
<td>30%</td>
</tr>
<tr>
<td>[BMI associated with 12% of total deaths]</td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td>18%</td>
</tr>
<tr>
<td>Deprivation</td>
<td>17%</td>
</tr>
<tr>
<td>Lack physical activity</td>
<td>10%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>3%</td>
</tr>
<tr>
<td>Illicit drug use</td>
<td>0.5%</td>
</tr>
<tr>
<td>Unsafe sex</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
Mesolimbic dopaminergic system
CONVERGING ACUTE EFFECTS OF RECREATIONAL DRUGS

-GABAergic interneuron feedback projections provide tonic inhibition of VTA neurons

-\( D_1 \) and \( D_2 \) receptors thought to mediate the action of rewards

Nature Neuroscience Vol. 8, 1445-49 2005
## Continuum Of Use

<table>
<thead>
<tr>
<th>NO USE</th>
<th>MODERATE</th>
<th>PROBLEMATIC</th>
<th>HAZARDOUS</th>
<th>HARMFUL [ABUSE]</th>
<th>DEPENDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiential use / Social use</td>
<td>Some Problems:</td>
<td>Problems and ↑ risk of long-term harm</td>
<td>Problems and ↑ risk of harm and long term damage</td>
<td>All problems and 3 or more of the following:</td>
<td></td>
</tr>
<tr>
<td>• No Major problems</td>
<td>• Missed Work</td>
<td>• relationship problems</td>
<td>• Health</td>
<td>• Withdrawal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Comedown /Hangover</td>
<td>• crime</td>
<td>• Violence</td>
<td>• Using to relieve withdrawals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Family/ Whanau quarrels</td>
<td></td>
<td>• Break-ups</td>
<td>• Not able to predict or control use</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Loss of Job</td>
<td>• Persist despite harm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Rapid return to dependence if relapse after abstinence</td>
<td></td>
</tr>
</tbody>
</table>
SPECTRUM OF ALCOHOL USE

Dependent

Harmful/abuse

Hazardous

Safe use

Abstention

1 in 6 (16%) of GP Patients
STANDARD DRINK

- NZ: 10g alcohol [12.7ml ethanol]
- 330ml beer
- 100ml wine
- 30ml spirits

- 1 can RTD (ready to drink, alcopops) = 1.5 SD

SAFE ALCOHOL LIMITS

**Women**
- No more than 4 drinks per day
- No more than 14 drinks per week
- And have some alcohol-free days each week

**Men**
- No more than 6 drinks per day
- No more than 21 drinks per week
- And have some alcohol-free days each week
SCREENING QUESTIONS FOR EVERY ADULT PATIENT

**smoking**

Hopefully we are routinely taking a smoking history

**alcohol**

SINGLE SCREENING QUESTION:
How many times in the past year have you had
- [Women] 5 or more drinks per day?
- [Men] 7 or more drinks per day?
**Patient Information**

- Ethnicity: "Asian not defined"
- Not High Needs Patient

**Potential Programmes and Episodic Care Consults for this Patient**

<table>
<thead>
<tr>
<th>Programmes and Episodic Care Consults</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Funded / Not Enrolled</td>
<td></td>
</tr>
</tbody>
</table>

**Patient Risk Factors**

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Date</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure</td>
<td>160/90</td>
<td></td>
</tr>
<tr>
<td>Weight / Height</td>
<td>Not recorded</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>Light drinker - 1-2u/day (1363.00)</td>
<td>21 Jun 2006</td>
</tr>
<tr>
<td>Smoking</td>
<td>Not recorded</td>
<td></td>
</tr>
<tr>
<td>Diabetes Screen</td>
<td>Not relevant</td>
<td></td>
</tr>
<tr>
<td>CVD Screen</td>
<td>Not relevant</td>
<td></td>
</tr>
<tr>
<td>Cervical smear</td>
<td>No Endocervical Cell</td>
<td>3 Apr 2000</td>
</tr>
<tr>
<td>Mammography</td>
<td>Not relevant</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Recorded</td>
<td>21 Jun 2006</td>
</tr>
<tr>
<td>Vaccinations</td>
<td>Not relevant</td>
<td></td>
</tr>
<tr>
<td>Medications</td>
<td>No long-term medication</td>
<td></td>
</tr>
</tbody>
</table>

**Classifications**

- IHD
- Diabetic Asthma
- History of CHF
- Hypertension
- COPD

*Help Test Log Set PHO ID Version 2.8*
SCREENING FOR OTHER DRUG USE

- Do you use non-prescription or recreational drugs?
- Do you ever feel the need to cut down on their use?
- In the last year have you ever used them more than you meant to?
- Do you want help with your drug use?

[F Goodyear-Smith et al, BJGP, 2008]

- Are you having problems with any other drug use?
E-CASE FINDING & HELP ASSESSMENT TOOL [E-CHAT]

Case-finding and Help Assessment Tool (CHAT)*

1. How many cigarettes do you smoke on average a day?
   - No
   - Yes

2. Do you ever feel the need to cut down or stop your smoking?
   - No
   - Yes

3. Do you want help with your smoking?
   - No
   - Yes but not today
   - Yes

4. Do you drink alcohol?
   - No
   - Yes

5. Do you ever feel the need to cut down on your drinking alcohol?
   - No
   - Yes

6. In the last year, have you ever drunk more alcohol than you meant to?
   - No
   - Yes

7. Do you want help with your drinking?
   - No
   - Yes but not today
   - Yes

8. Do you use non-prescription or recreational drugs?
   - No
   - Yes

9. Do you ever feel the need to cut down on your non-prescription or recreational drug use?
   - No
   - Yes

10. In the last year, have you ever used non-prescription or recreational drugs more than you meant to?
    - No
    - Yes

11. Do you want help with your drug use?
    - No
    - Yes but not today
    - Yes

12. Do you gamble?
    - No
    - Yes

13. Do you sometimes feel unhappy or worried after a session of gambling?
    - No
    - Yes

14. Does gambling sometimes cause you problems?
    - No
    - Yes

15. Do you want help with your gambling?
    - No
    - Yes but not today
    - Yes

16. Over the last 2 weeks, how often have you been bothered by any of the following problems?
    - Not at all
    - Several days
    - More than half the days
    - Nearly every day

17. Little interest or pleasure in doing things
    - No
    - Yes

18. Feeling down, depressed, or hopeless
    - No
    - Yes

19. Do you want help with your mood?
    - No
    - Yes but not today
    - Yes

20. Over the last 2 weeks have you been worrying a lot about everyday problems?
    - No
    - Yes

21. Do you want help with your anxiety or worrying?
    - No
    - Yes but not today
    - Yes

22. Is there anyone in your life of whom you are afraid or who hurts you in any way?
    - No
    - Yes

23. Is there anyone in your life who controls you and prevents you doing what you want?
    - No
    - Yes

24. Do you want help with any abuse or violence that you are experiencing?
    - No
    - Yes

25. Is controlling your anger sometimes a problem for you?
    - No
    - Yes

26. Do you want help with controlling your anger?
    - No
    - Yes

27. As a rule, do you do more than 30 minutes of moderate or vigorous exercise (such as walking or a sport) on 5 days of the week?
    - Yes
    - No

28. Do you want help with getting more exercise?
    - No
    - Yes

* (Galea et al., 2006; Casper & Aron, 2006; Elley, 2004; Halsey, 2005; McDermott & A. Case-finding of lifestyle and mental health problems in primary care: validation of the 'CHAT', British Journal of General Practice, 56(525) 36-31, 2006)
OTHER SCREENING TOOLS

BPAC tools in your PMS: CHAT, PHQ-9, GAD-7, AUDIT, Kessler-10
NNT ALCOHOL

For every 7 interventions, 1 patient will reduce drinking to safer levels
BRIEF INTERVENTIONS E.G. FLAGS

- **Feedback** on the risks of continuing use, linking in to presenting problems
- **Listen** to any concerns, and for any readiness to change
- **Advise** change in order to limit bio-psycho-social consequences of ongoing use
- **Goals**: explore reducing or abstaining, what is realistic
- **Strategies** for achieving goals, eg identify the first step needed or Relapse Prevention

- **FOLLOW UP**
DISULFIRAM (ANTABUSE)

ALCOHOL

alcohol dehydrogenase

ACETALDEHYDE

aldehyde dehydrogenase

ACETATE

citric acid cycle

\[ \text{CO}_2 + \text{H}_2\text{O} \]

DISULFIRAM INHIBITS
DISULFIRAM – ALCOHOL REACTION

Within 5 – 30 minutes of alcohol:
- Hot flushed face
- Throbbing of head and neck
- Dyspnoea, nausea, vomiting, sweating, thirst, chest pain, hypotension, weakness, vertigo, blurred vision, confusion, marked distress
- Lasts up to several hours, may be ill several days
- Exhaustion, sleep
CLINICAL USE

- Start 12 – 48 hours after last alcohol
- 100– 500mg daily, usually 200mg
- Warn re sauces, mouthwash, cough mixt, perfume, aftershave
- Sensitisation to alcohol may continue for 6 – 14 days after last dose of disulfiram
- Continue 6 – 12 months, or long term
CAUTIONS

- Frailty, hx serious heart disease, stroke, hypertension, diabetes
- Psychotic illness, severe personality disorder
- May be teratogenic
- May interact w metronidazole, isoniazid
NALTREXONE (REVIA)

- Opioid antagonist
- Alcohol facilitates brain opioid systems
- Reduces craving
- Reduces intoxication
- Reduces continuation of drinking
- Dose: 50mg daily
- Addiction specialist only
BUPRENORPHINE/NALOXONE (SUBOXONE)

- Buprenorphine previously temgesic sublingual, [now subutex NOT available in NZ]
- Approved indication in NZ = ONLY for treatment of opiate dependence, within framework of medical, social and psychological treatment
- 2mg buprenorphine + 0.5mg naloxone
- 8mg buprenorphine + 2mg naloxone
- Naloxone to deter intravenous misuse
- Used as maintenance or to wean opioid users
- NSS: 16/16/16/8mg, Mon/Wed/Fri/Sun = $58 per week
Controlled drug classification = C4 (ie Schedule 3 Class C controlled Drug Part 4, “Misuse of Drugs Act 1975”)
Section 24(1) states that “...every medical practitioner commits an offence against this Act....who prescribes, administers or supplies any controlled drug for or to any person, whom the practitioner has reason to believe is dependent (on that or any other controlled drug) in the course, or for the purpose of treatment of dependency except...."
....except if the medical practitioner is acting with the permission in writing, given in relation to that particular person by an authorised medical practitioner.” S24(2)(d).
Only gazetted specialist services (e.g. Alcohol & Drug Services), gazetted GP’s and Authorised GP’s can prescribe for people dependent on controlled drugs. See S24(2)(a)(b)(c)
CLASSIFICATION OF CONTROLLED DRUGS

- Class A drugs pose a very high risk of harm
- Class B drugs pose a high risk of harm
- Class C drugs pose a moderate risk of harm
Class A: eg. heroin; methamphetamine

Class B1: eg. morphine; opium; cannabis oil

B2: eg. methylphenidate; amphetamine

B3: eg. fentanyl; pethidine
CLASS C

- C1: eg. cannabis plant; Catha edulis plant (Khat)
- C2: eg. codeine; dihydrocodeine
- C3: eg. Pholcodine
- C4: eg. buprenorphine; barbiturates (no longer prescribed)
- C5: eg. benzodiazepines; phenobarbitone; ephedrine; pseudoephedrine
- C6: eg. codeine/paracetamol; (mixtures of class C drugs with other substances)
THE SUGAR ADDICT’S TOTAL RECOVERY PROGRAM

All-Natural, Simple Solutions That:
- Eliminate Food Cravings • Build Energy
- Enhance Mental Focus • Heal Depression

Kathleen DesMaisons, Ph.D., Addictive Nutrition
Author of Potatoes Not Prozac

PATRICK HOLFORD
David Miller PhD & Dr James Braly

how to QUIT without feeling S**T

The fast, highly effective way to end addiction to caffeine, sugar, cigarettes, alcohol, illicit or prescription drugs
PARALLELs

- Pleasure, comfort eating
- Harmful consequences
- Screening questions: caffeinated drinks, sugar, narrow palate
- Parallels with successful drug withdrawal: gradual reduction, ‘long and slow...to quietly establish a long-term change in lifestyle’.
ACKNOWLEDGEMENTS

- CADS Auckland colleagues
- University of Auckland School of Pharmacy
- Internet

Thank You