DETOXIFICATION

LEEDS ADDICTION UNIT

October 2008

Detoxification

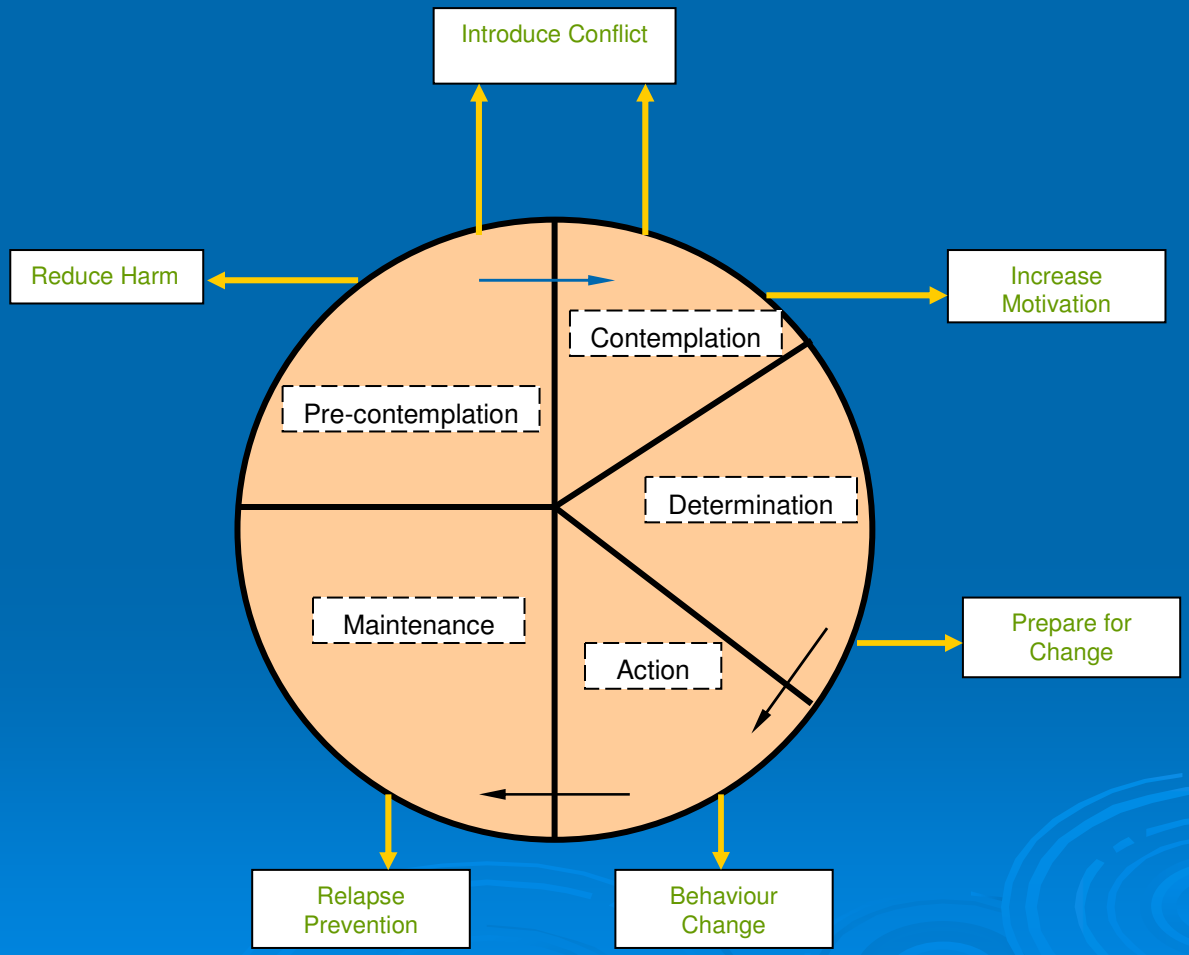
What factors should we consider when thinking of detoxification?

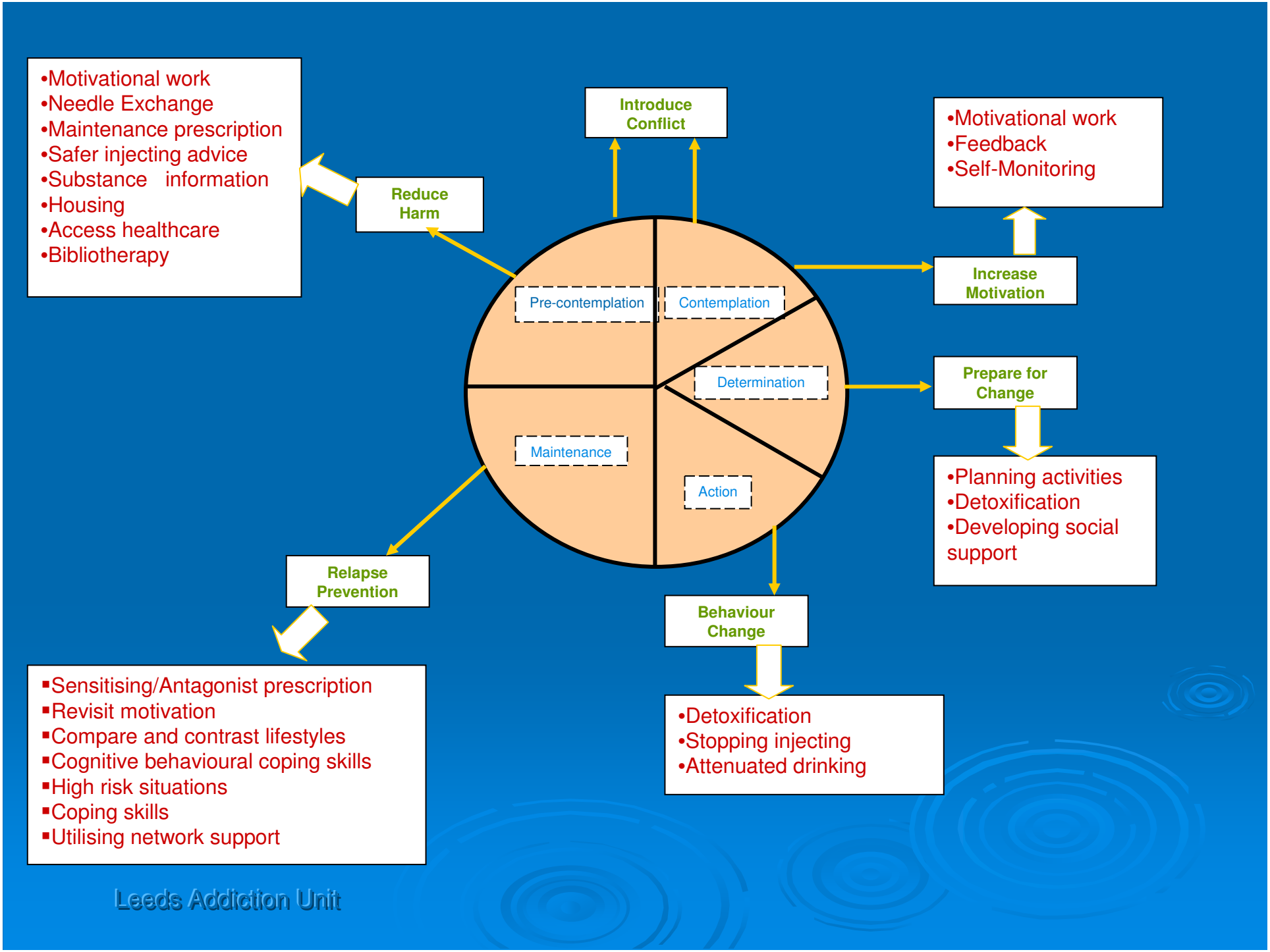
- Dependence
- Model of Change
- Motivation

The Seven Markers of Dependence

- Increased tolerance
- Repeated withdrawal symptoms
- Craving
- Salience of drug-seeking behaviour (Simply obtaining the drug becomes increasingly important at the expense of other aspects of the drug users life)
- Relief or avoidance of withdrawal symptoms
- Narrowing of the repertoire of drug taking behaviour (Drug use becomes a daily activity, an increasingly strict daily routine of drug taking develops)
- Reinstatement of drug taking after a period of abstinence

Matching Interventions to Stages of Change




•Motivational work
•Needle Exchange
•Maintenance prescription
•Safer injecting advice
•Substance information
•Housing
•Access healthcare
•Bibliotherapy
Reduce Harm
Introduce Conflict
•Motivational work
•Feedback
•Self-Monitoring
Increase Motivation
Pre-contemplation
Contemplation
Determination
Maintenance
Action
Prepare for Change
•Planning activities
•Detoxification
•Developing social support
Relapse Prevention
Behaviour Change
▪Sensitising/Antagonist prescription
▪Revisit motivation
▪Compare and contrast lifestyles
▪Cognitive behavioural coping skills
▪High risk situations
▪Coping skills
▪Utilising network support
•Detoxification
•Stopping injecting
•Attenuated drinking
Leeds Addiction Unit

Features of determination & action stages of change

Determination

- High self efficacy
- Positive outcome expectancy
- Ready to change
- Planning
- Commitment

Action

- Behavioural change
- Implementation
- Highly motivated
- Affirmation seekers

Motivation

How do we recognise the motivated patient?

- Problem recognition
- Expression of concern
- Intention to change
- Expression Optimism

Detox preparation

In small groups identify the main areas to be addressed in detox preparation

- How will life be better?
- Coping with withdrawals
- Activities
- Support
- Differences compared to previous attempts
- Identifying risks & coping strategies
- Planning for the future

Effects of Opiates

Physical

- Constipation
- Pin-point pupils
- Drowsiness
- Respiratory depression

Psychological

- Sense of euphoria
- Deep relaxation
- Suppression of pain

Withdrawal from Opiates

- Aching limbs
- Stomach cramps
- Diarrhoea
- Dilated pupils
- Anxiety
- Sweating
- Goose flesh
- Vomiting
- Insomnia

Dihydrocodeine

- Dihydrocodeine has the benefit of familiarity for many opiate users so that they are likely to self titrate reasonably well.

- The disadvantage is that detoxification often becomes stalled and frequently fails.

Methadone

What are the drawbacks of methadone for detoxification?

- Methadone detoxification, as opposed to slow reduction, is not recommended but is sometimes the service users regimen of choice. The problem is a more prolonged withdrawal and a longer wait to initiate naltrexone. Detoxification from methadone poses particular problems because of its long half life and the preferred methadone regimen is to crossover, either to buprenorphine or dihydrocodeine and then follow the standard withdrawal procedure.

Buprenorphine
(Subutex)

Buprenorphine crossover and withdrawal regimen

- Buprenorphine has a high affinity for opiate receptors and is able to displace methadone and heroin while at the same time blocking withdrawal effects. Buprenorphine also resides in the receptor long after elimination from blood, thus there is a mild protracted residual withdrawal; this is similar to but of less severity than with methadone.

- There should be evidence of withdrawal before commencing a buprenorphine detoxification otherwise withdrawal will be precipitated. The last dose of methadone should be at least 24 hours prior to commencement of a crossover regimen.

Buprenorphine Regime

	Total daily dose of buprenorphine		Total daily dose of buprenorphine	
	Crossover phase – methadone 30 mg		Crossover phase – methadone 20 mg	
Day 1	4 mg + 2 mg *		4 mg + 2 mg *	
Day 2	8 mg		6 mg	
Day 3	8 mg		6 mg	
Day 4	8 mg		6 mg	

*On day one of either crossover or detoxification 2 mg is given as a take home dose to be used if withdrawal symptoms reoccur. Another 2 mg may be added to this if necessary.

Buprenorphine

	Withdrawal phase from methadone	Withdrawal phase from heroin £30	Withdrawal phase from methadone	Withdrawal phase from heroin £20
Day 5	6 mg	4 mg + 2 mg	4 mg + 2 mg	4 mg + 2 mg
Day 6	4 mg	8 mg	4 mg	6 mg
Day 7	2 mg	6 mg	2 mg	6 mg
Day 4	2 mg	4 mg	2 mg	4 mg
Day 5	1.6 mg	2 mg	1.6 mg	2 mg
Day 6	1.2 mg	0.8 mg	1.2 mg	0.8 mg
Day 7	0.8 mg	0.4 mg	0.8 mg	0.4 mg
Day 8	0.8 mg		0.8 mg	
Day 9	0.4 mg		0.4 mg	
Day 10	0.4 mg		0.4 mg	
Two days after the last dose of buprenorphine the service user can be started on naltrexone.				
*On day one of either crossover or detoxification 2 mg is given as a take home dose to be used if withdrawal symptoms reoccur. Another 2 mg may be added to this if necessary.				

Post Opiate Detox

- Naltrexone can be given once the opiate receptors are opiate free. The receptor will be blocked and prevent any subsequent use of opiates from producing an effect at that site.

- This should be prescribed in conjunction with appropriate psychosocial interventions such as coping skills / SBNT

Alcohol Withdrawal

What are the symptoms of alcohol withdrawal?

- Tremor
- Nausea
- Sweating
- Anxiety / agitation

Complications of Alcohol Withdrawal

- Transient hallucinatory experience
- Delerium tremens
- Alcohol withdrawal seizures

Chlormethiazole
(Hemineverin)

- **Chlormethiazole** Should not be used in the community. Offers marginally better protection against seizures and delirium than benzodiazepines and may be used for the treatment of severe withdrawal on an in-patient basis. This should only be undertaken by experienced physicians.

Oxazepam

- **Oxazepam** is not metabolised by the liver and is the drug of choice where there is substantial impairment of liver function.

Chlordiazepoxide
(Librium)

- **Chlordiazepoxide** is the drug of choice for most detoxifications. It is long acting, has low reinforcement potential.

  A maximum daily dose of chlordiazepoxide should not normally exceed 120mg but may be increased to 160mg where there is a history of alcohol withdrawal seizures.

Chlordiazepoxide Regime

	Morning	Midday	Evening	Night	Total daily dose
Severe withdrawal					
Day 1	30 mg	30 mg	30 mg	30 mg	120 mg
Day 2	30 mg	20 mg	20 mg	30 mg	100mg
Moderate withdrawal					
Day 3	20 mg	20 mg	20 mg	20 mg	80 mg
Day 4	20 mg	10 mg	10 mg	20 mg	60 mg
Day 5	10 mg	10 mg	10 mg	10 mg	40 mg
Day 6	10 mg	10 mg	0	10 mg	30 mg
Day 7	10 mg	0	0	10 mg	20 mg

Supplementary Prescriptions

Vitamin supplements

- Healthy, uncomplicated dependent drinkers should receive thiamine 100 mg tds and vitamin B co Strong two tabs tds until they are eating regularly.
- If Wernicke's Encephalopathy is suspected then Pabrinex should be used 500 mg once or twice daily for 3 – 5 days. One pair of Pabrinex ampoules provide thiamine 250 mg and other B and C vitamins.

Anti-hypertensives

- If the systolic is ≥ 160mmHg or diastolic is ≥ 90mmHg consider short term treatment. Beta-blockers or thiazide diuretics are first line treatments.

Supplementary Prescriptions

Cont…

Anti-convulsants

- If a seizure occurs during withdrawal it is more likely to recur in subsequent episodes of withdrawal. Evidence shows that benzodizapines significantly reduce the incidence of seizures. Adding anti-convulsants to this regimen does not confer an advantage.

Delirium

- If monitoring withdrawal suggests delirium then hospital admission should be arranged.

Post Alcohol Detox

- Acamprosate
- Disulfiram

References

- *Guidelines for the prevention and treatment of Wernicke-Korsakoffs syndrome*, Leeds PFT policy, July 2008.
- *NICE Guidelines CG52 Opioid detoxification,* July 2007.
- *Drug Misuse and dependence UK guidelines on Clinical management*, DOH, 2008.