

**RCGP Drug and Alcohol Misuse
Training Programme
RCGP Sex, Drugs and HIV Task Group
SMMGP**

Use of buprenorphine in primary care

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Wednesday 2nd April

Annie

- Annie comes to ask for help
- Has been injecting heroin on and off for 7 years, 4 times/day, about 1 gm/day, smoked for 4 years previous to this
- She also uses crack occasionally
- She drinks about twice a week about 2 cans of lager

In whom may it be useful?

- Opioid dependent
- Informed consent to treatment with buprenorphine

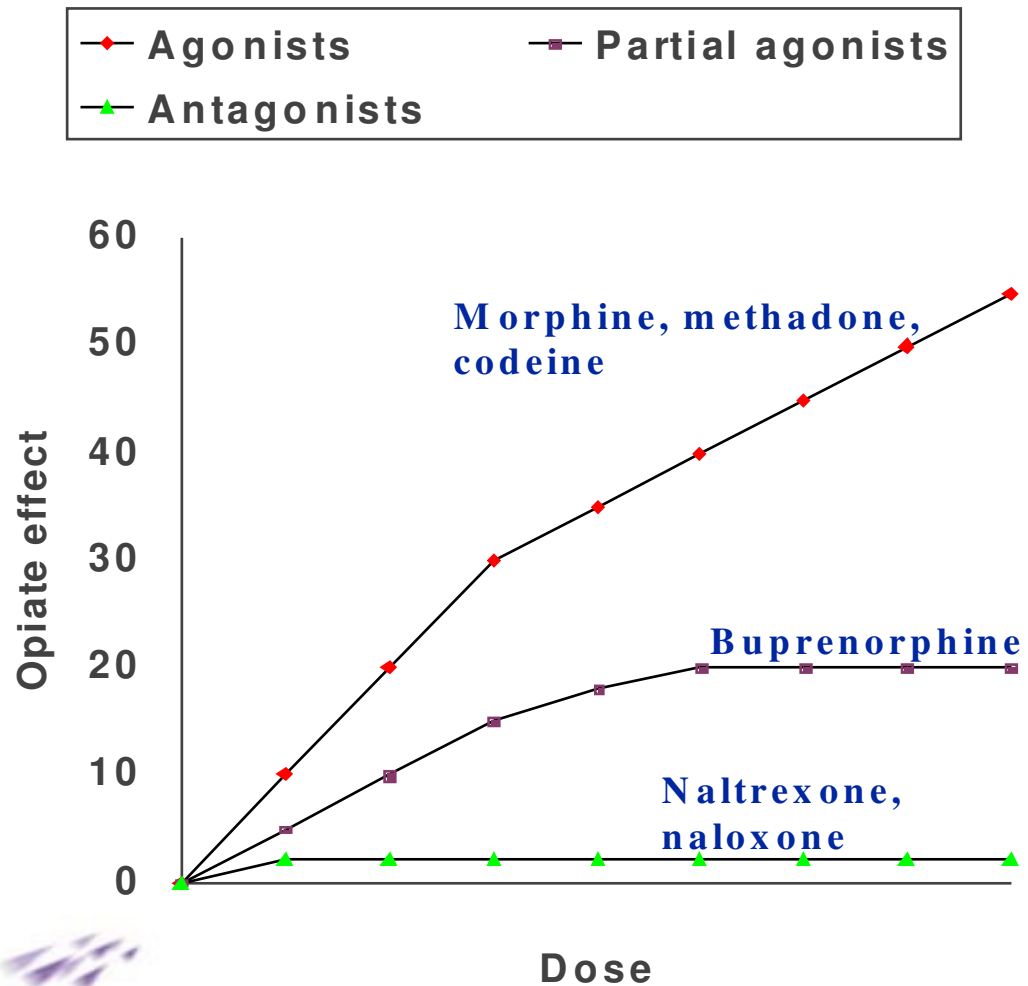
Increasing consensus

- Buprenorphine may be better suited to those who wish to cease using heroin
- Patients who wish to continue to use heroin may prefer low dose methadone treatment.
- Withdrawal from buprenorphine appears to be milder than from methadone, and as such may be preferred for those considering a detoxification program.
- The transition from buprenorphine to naltrexone can be accomplished much earlier

Choosing between buprenorphine and methadone

- Buprenorphine and methadone are of similar efficacy in retaining clients in treatment and reducing heroin use.
- Limited evidence of superiority of either medication for particular subgroups
- Decision as to which to use should be made in consultation with each patient after consideration of the relative merits of each medication.

Classification of Opioids



Buprenorphine

Advantages:

1. Less dangerous in overdose
2. Between 8- 32mgs use 'on top' markedly reduced, max between 12-24 mg daily
3. Useful in maintenance and detoxification
4. Easier to withdraw from
5. Clearer head

Disadvantages:

1. Highly soluble leading to potential for injection
2. Can precipitate acute opiate withdrawal if used incorrectly
3. Less 'opiate-like' or 'clouding' effect
4. More expensive than methadone

Comparison of methadone & buprenorphine profiles (1)

	Methadone	Buprenorphine
Classification	Full μ agonist	Partial μ agonist
Substitutes for heroin	+++	++
Blocks effects of heroin	++ At high doses (e.g.>60 mg)	++++ At low doses (e.g.> 4 mg)
Side effects	Opiate-like	Less sedating Precipitated w/d
Withdrawal on cessation	+++ Described as severe & prolonged	++ Less severe

Comparison of methadone & buprenorphine profiles (2)

	Methadone	Buprenorphine
Onset of effects	30 – 60 min	30 – 60 min
Peak effects	3 – 6 hours	1 – 4 hours
Duration of clinical effects	16 to 30 hours	Up to 2 – 3 days at high doses
Metabolism	Hepatic MES +++ Affected by liver function	Hepatic MES & conjugation Less clinical impact of liver function
Mode of administration	Oral	Sublingual
Drug interactions	Sedatives Opioid antagonists Inducers / inhibitors MES	Sedatives Opioid agonists & antagonists

Buprenorphine v. methadone

ADVANTAGES	DISADVANTAGES
Smoother opiate effect	Dispensing more time
Less sedating	Diversion problems
Safer in overdose	Difficult to transfer maintenance levels of methadone
Milder withdrawal	In pregnancy?
Some prefer	Some don't
Long acting – 1 or more day dosing	

Don't change for change sake

- If patient doing well in either methadone or buprenorphine treatment should remain on their medication.
- Patients who are not responding well to adequate doses of methadone or buprenorphine, or who are experiencing persistent unwanted effects or difficulties with their medication may benefit from transferring to the other medication.

Annie

- Has been injecting heroin on and off for 7 years, 4 times/day, about 1 gm/day, smoked for 4 years previous to this
- Never been in treatment before
- Wants to stop

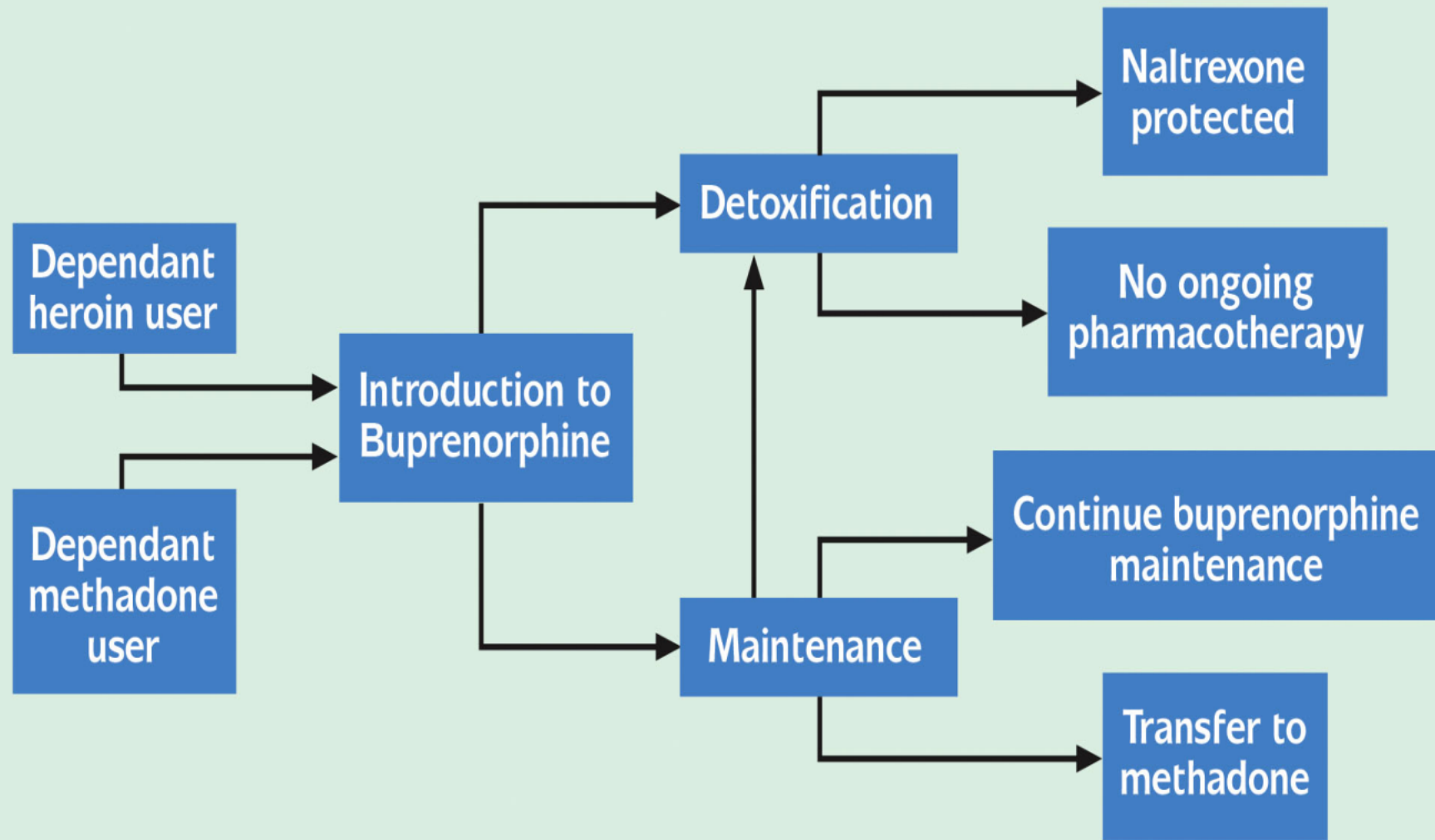
Maintenance or Detoxification?

- How to decide?
- Ask patient
- Give evidence to patient
- Decide – don't slip between the two!!
- NTORS

Bridging gaps

- Useful when new to treatment and undecided what to do
- Bridge gap between detoxification and maintenance

Pathways into and out of Buprenorphine Treatment



Why might Annie want a detox?

- Wanting abstinence – going for rehabilitation: residential or day, naltrexone, counselling
- Wanting temporary relief from dependent use
- Ambivalent regarding maintenance

Objectives of detoxification

- To alleviate withdrawal symptoms
- To interrupt a period of heavy, regular or dependent heroin use
- As a stage to opiate free treatment
- *Detoxification is not a 'cure' for heroin dependence*

What do we need for a good detoxification programme?

- Good assessment and preparation
- Safe environment
- Support, counselling
- Medication
- Post detox plan and linkages
- Stage not an end-stage

Withdrawal

Heroin:

- Commences 8-12 hrs after last dose
- Peak severity 2-4 days
- Resolution most symptoms 7 days
- Cravings, sleep & mood may go on for weeks or even months

Buprenorphine:

- Withdrawal after stopping long term use
- Milder than ?heroin & methadone
- Peak 2-5 days, mild symptoms persist for weeks

How to do it

From heroin:

- Wait at least 8 hrs & withdrawals, start 4mgs BPN & increase daily 4mgs until OK, stabilize 1-2 weeks then reduce 2mgs/week then 0.4mgs/week

From methadone:

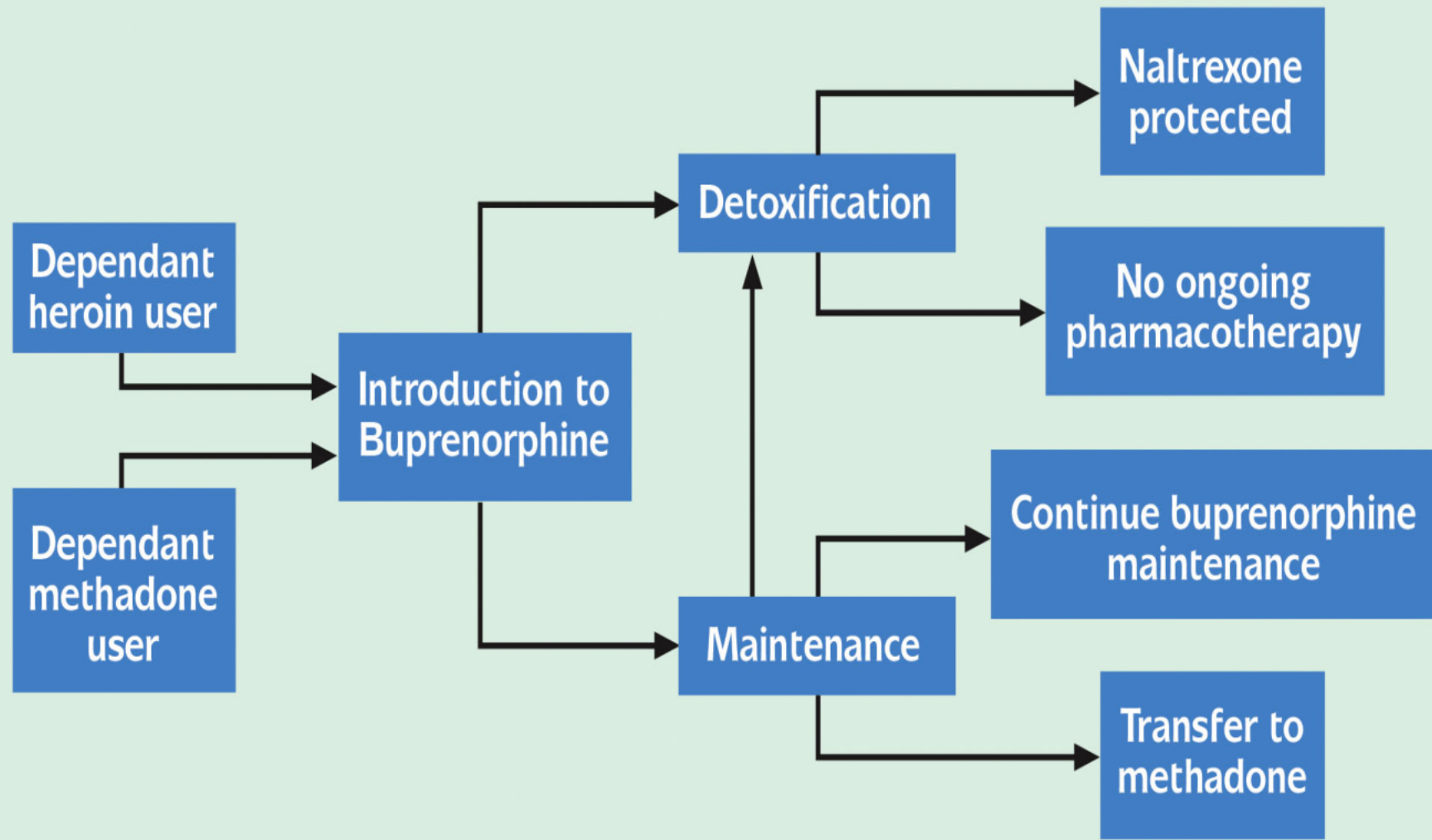
- Down to 20-30mgs, stop, wait 24-36hrs & withdrawals, 4mgs > 6-8mgs and then same

How successful is detoxification?

Annie

- Annie did well and stopped injecting but started to take heroin when she reduced to 2mgs
- What are her/our options now?

Pathways into and out of Buprenorphine Treatment



Objectives of maintenance treatment

- To reduce heroin and other drug use
- To reduce injecting and its complications, including blood borne viruses
- To reduce mortality
- To improve the general health and well being of patients
- To reduce drug related crime

Why maintenance?

- Provide long acting opioid which enables patients to cease / reduce their heroin use and related behaviours
- Reduced mortality and morbidity
- Long term treatment approach provide the opportunity for patients to distance themselves from drug using lifestyle
- Combines medication with psychosocial services

Buprenorphine maintenance

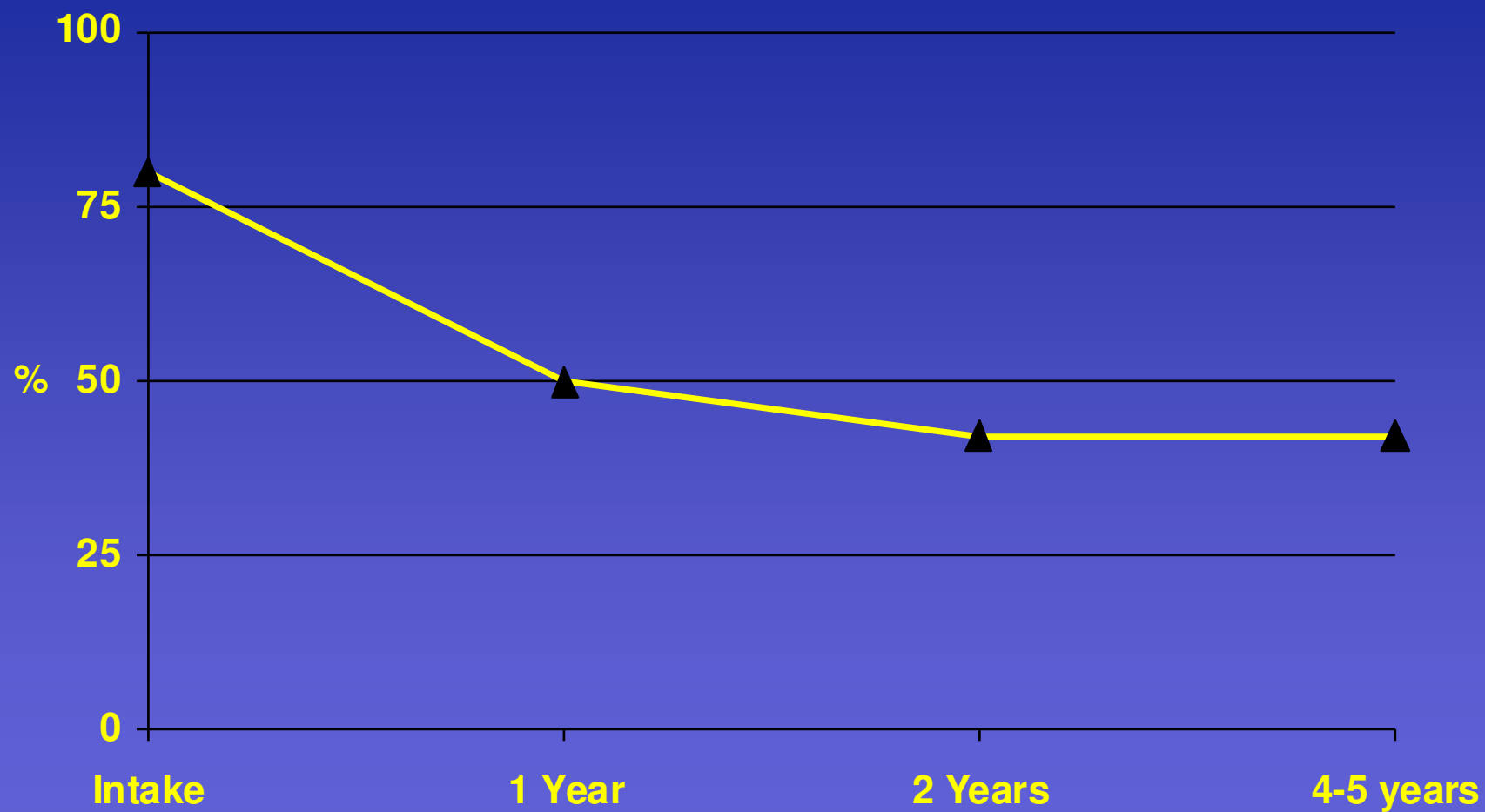
- Buprenorphine and methadone have comparable efficacy for maintenance treatment
- Suitable for heroin users and patients transferring from methadone programmes (<30mgs)

What makes an effective maintenance programme?

Outcomes improved with:

- Increased access to medical services
- Increased access to psycho-social support: counselling, self-help groups, community groups
- Regular monitoring and review of client progress, self report, urine
- Identifying and responding to changes, problems, other drug use

Regular heroin use (all methadone clients)



Maintenance buprenorphine doses

- Dose should be individualised
- Optimal dose: 12-24 mgs / day
- Range 2-32mgs (never above)
- Not the same as or a linear relation to methadone
- Heroin use is related to dose of buprenorphine:
 - Less heroin use and better treatment retention with higher buprenorphine doses (16mgs or above)
 - Some patients cannot stabilise on buprenorphine: if continue to use heroin regularly and/or 'need' high opiate effects

Buprenorphine dose increments

- Increases in buprenorphine dose can occur with every dose, subject to review of patient by the prescribing doctor
- Increase dose by 2-4mgs at a time
- Steady state equilibrium does not occur until 3-7 days after a dose change, so beware of 'overshooting' the dose

Choosing substitution maintenance medications

- Research has not identified whether certain types of patients respond better to buprenorphine / methadone
- The choice between methadone or buprenorphine depends on:
 - response to treatment
 - Individual variation in absorption, metabolism
 - Unwanted (Side) effects
 - Patient and clinician expectancy
 - Availability

Buprenorphine v methadone maintenance treatment

MMT > 80mgs

Better than

Medium dose MMT (40-80mgs)

Medium dose BMT (8-12mgs)

Better than

Low dose MMT (<40mgs)

Low dose BMT (<8mgs)

ABOVE 12MGS BMT ???????

Where is Annie now 6 months on?

- Stable on 16mgs of buprenorphine
- Stopped crack use
- Urines show cannabis and nil else
- Started job in animal dispensary
- Child continues to do well at school
- Partner on methadone