Alternatives to methadone and buprenorphine

Jack Leach, clinical director Cheshire substance misuse services

Areas to discuss

- Patient not doing well in treatment
- Is there something unique about methadone?
- Changing opiate replacement medication; what options are there?
  - Suggested and evaluated
  - Suggested and unevaluated
- What to consider when considering
- Converting between different opioids

Not doing well in treatment?

- How do you judge?
  - Client perspective
  - Family/partner/carer perspective
  - Drug worker perspective
  - Your perspective
- Any objective measures?
  - Drug and alcohol use; drug tests, injecting sites, engagement in treatment
  - Mental and physical health
  - Social situation, relationships and criminal offending

What would you do?

- Blip or trend?
- Address aggravating/blocking issues
- Improve/optimise drug treatment
  - Psychological support /interventions
  - Social support/interventions
  - Medication; dose and dose frequency
- If continues not to do as well as one would like? **Bear in mind what comparing this too!**

Changing opiate replacement medication - issues

- Many services have constraints about what can be prescribed
- A number of altenatives opioids have been suggested and evaluated to varying degrees, however:
  - Seem overall of similar effectiveness to methadone/BPN
  - But unclear if for individual patients they work better or worse than methadone
  - Uncertainty about their relative safety
  - Problems with dose conversions
  - Considerable variations in cost
  - Concern about abuse potential and diversion.

Is there something unique about methadone?

- What features of methadone makes it work?
  - Potent opiate agonist, predictable dose response
  - Long duration of action and predictable pharmacology
- So two crucial groups of questions:
  - Will other opiate agonists work as well as methadone and what are the most effective characteristics?
  - If other opioids also work, will they work when methadone doesn't or are there circumstances when they will work better than methadone?

Suggested and evaluated

- Oral
  - LAAM
  - Buprenorphine and naltrexone combination
  - Dihydrocodeine
  - Oral morphine sulphate preparations
- Injectable
  - Methadone
  - Diamorphine

Buprenorphine naltrexone combination (Suboxone)

- Does not appear popular, why not?
- Pros:
  - Well evaluated
  - Seems to take away hassle clients get from other drug users
  - Seems to discourage injecting use
- Cons:
  - Cost
  - Combination
  - Could make patients ill.

Dihydrocodeine

- Considerable experience in prison and Germany and some research (Robertson 2006)
- Short acting or sustained release
- Dosing and dose conversion
- Short acting opiates re-enforce drug using behaviour?
- Abuse potential

Oral morphine preparations

- Some research to support
- Some preparations are long acting and can be taken daily supervised
- Dosing and dose conversions
- Monitoring medication and drug use; not easily or accurately distinguished from heroin use

Methadone for injection

- Very little research despite long history of use in England (only country in world)
- For clients who can not stop injecting; long history of intractable injecting
- No major current or past complications likely to make continued injecting particularly hazardous e.g. severe sepsis, endocardititis, DVT and losing limbs
- Sneaky way of giving methadone?
- BUT perpetuate injecting behaviour and risks of continued injecting, difficulty supervising and risk of diversion.

Diamorphine for injection

- Long history of use in England. Research pilots in other countries (Switzerland, Netherlands, and Germany. Relatively little evaluation and results difficult to interpret. Note recent UK RIOTT trial
- Pros: better at controlling heroin use and associated problems, what patients want,
- Cons; expensive, potentially dangerous, high risk of diversion, perpetuates injecting

Suggested and not evaluated

- Oral
  - Palfium
  - Diconal
  - Diamorphine
- Transdermal patches
  - Buprenorphine
  - **Fentanyl**
- Rectal
  - Methadone
- Injectable
  - cyclimorph
  - **buprenorphine**

When considering an alternative

- Research evidence
- Political attitude
- Mode of use
- Safety and abuse (to themselves)
- Cost
- Diversion (danger to others); ability to supervise dosing
- Ability to monitor

Comparison to oral methadone

OPIOID	SAFETY	DRUG COST	DIVERSION POTENTIAL
DHC	Should be similar Problem supervising	Similar	Similar
ORAL MORPHINE	Should be similar Problem monitoring	Around 3 times	Similar
METHADONE AMPS	Greater risks Problem supervising	Around 1.5 times	Greater
DIAMORP AMPS	Greater risks Problem supervising and monitoring	Around 5 times	Much greater

Conversions between opioids

- Evidence from substance misuse and palliative care fields. However, these may not be directly applicable to each other
- Considerable variation in conversions, some more than others, this seems due to:
  - Lack of objective studies and a lot of subjective opinions
  - Many assume linear conversions but for some opioids this does not appear to be the case; in particular methadone and buprenorphine!
- **For copy of my version of conversions between different opioids, email me at jack.leach@cwp.nhs.uk BUT just must give me feed back on it!**

References/readings

- Email jack at jack.leach@cwp.nhs.uk if you would like a full list of all references I have used in compiling this presentation. Includes:
- 1. published studies on effectiveness of different opioids in treatment of opiate dependence
- 2. References used for estimating conversion rates between different opioids
- 3. Clinical guidelines for prescribing alternative opioids for treatment of opiate dependence

Thank you, copy of overheads available from:

Jack.leach@cwp.nhs.uk