Medical management of detoxification with Buprenorphine

Presented by:

Dr.Mohammad Salehi (M.D., Ph.D of Addiction study)

Department of Neuroscience and Addiction Studies, School of Advanced Technologies in Medicine, Tehran University of Medical Sciences.

Iranian National Center for Addiction Studies (INCAS), Tehran University of Medical Sciences

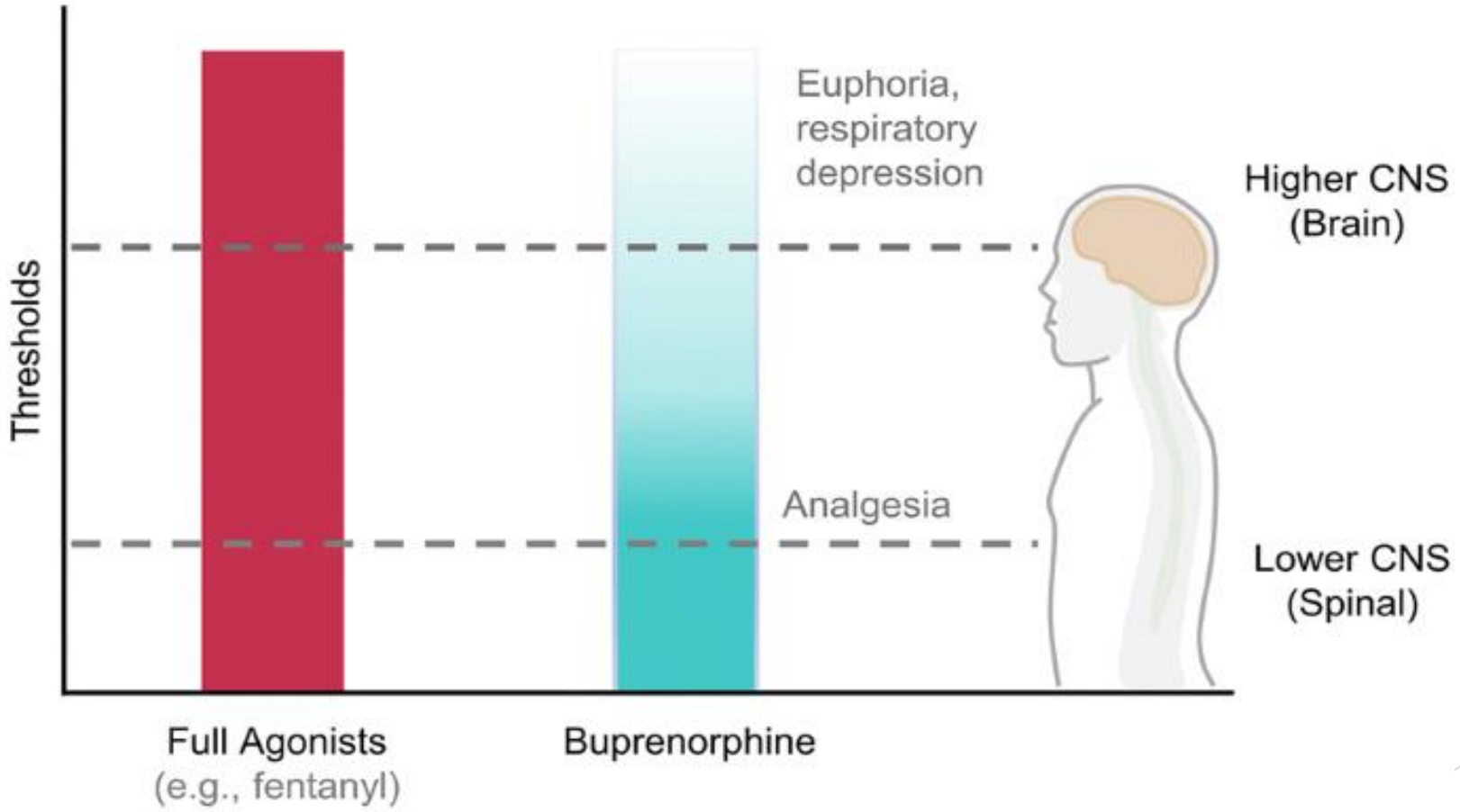
Detoxification ?

The process of removing harmful chemicals from something

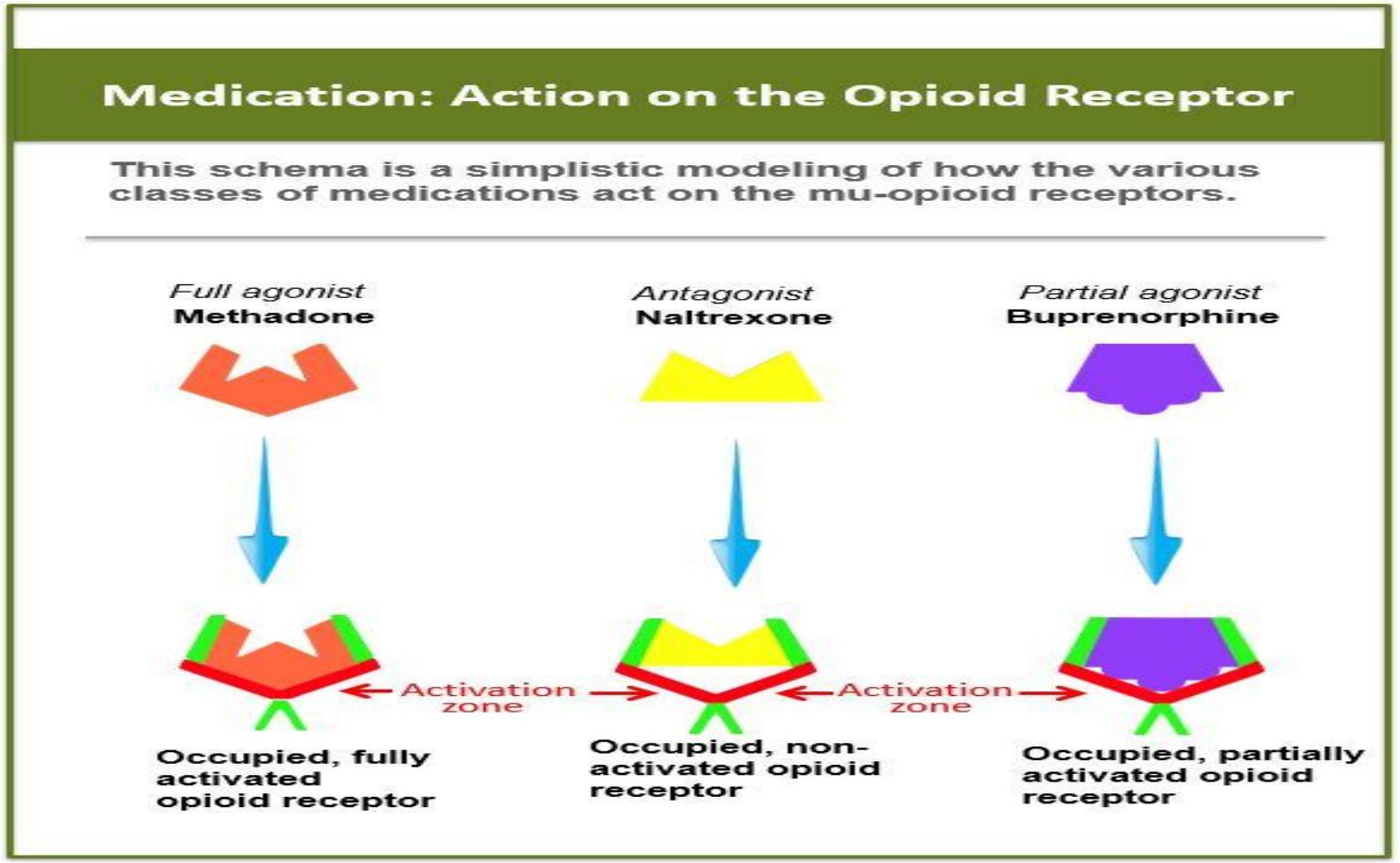
The physiological or medicinal removal of toxic substances from a living organism, including the human body, which is mainly carried out by the liver. Additionally, it can refer to the period of drug withdrawal during which an organism returns to homeostasis after long-term use of an addictive substance

Medical treatment of an alcoholic or drug addict involving abstention from drink or drugs until the bloodstream is free of toxins.

Buprenorphine

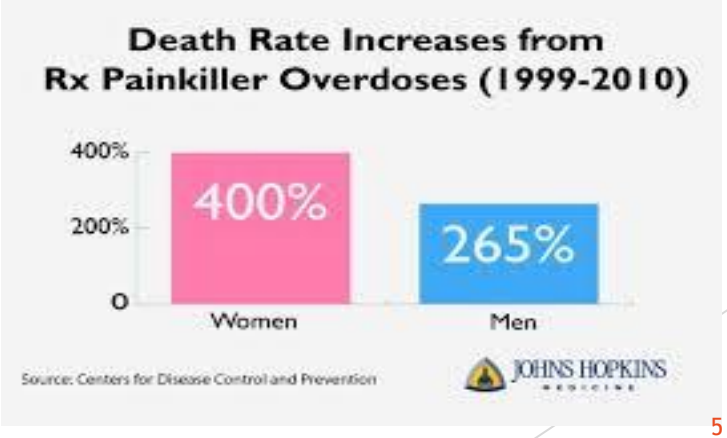


Buprenorphine



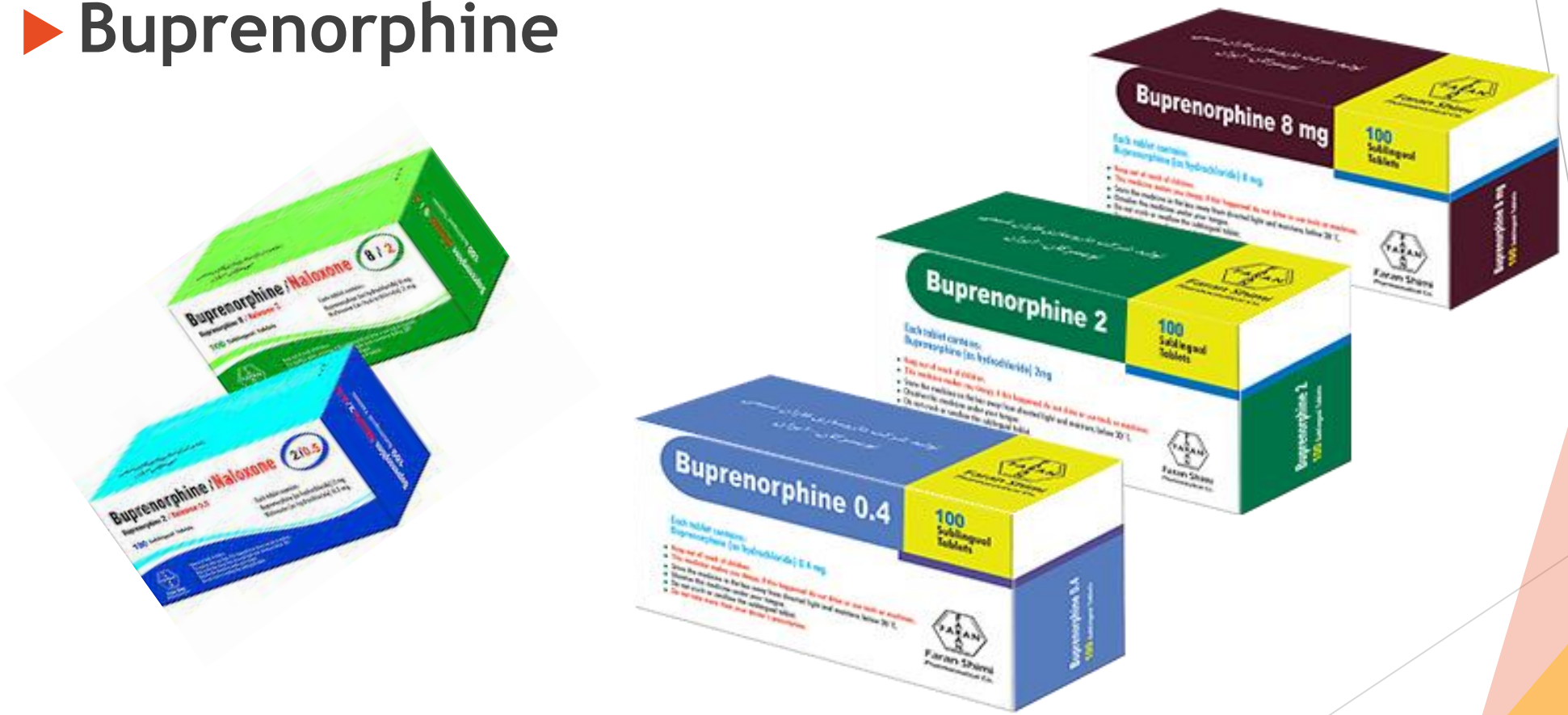
Buprenorphine detoxification

- Prescribe pain killers



Buprenorphine detoxification

- Buprenorphine



Buprenorphine detoxification

- Methadone

Buprenorphine detoxification

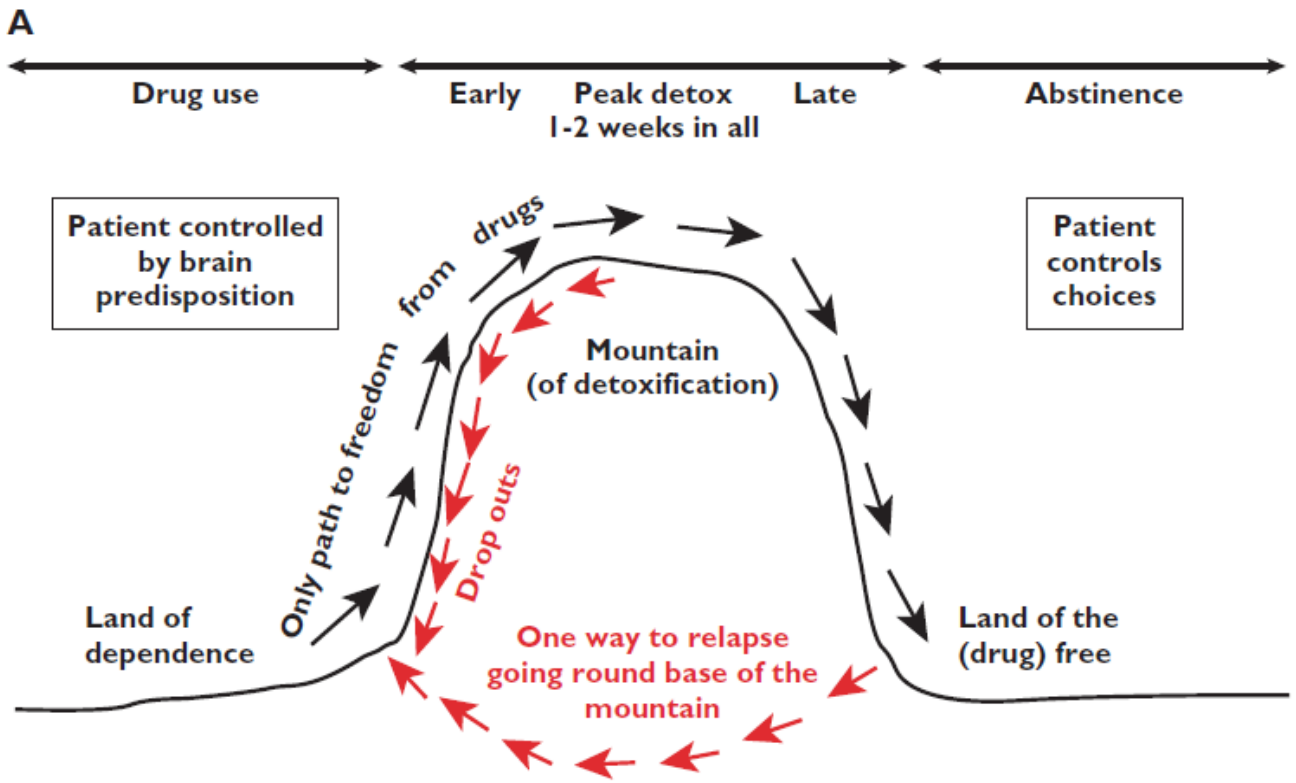
- Opium

Medical management of detoxification ?

Table 2. Symptoms of Opioid Withdrawal[22]

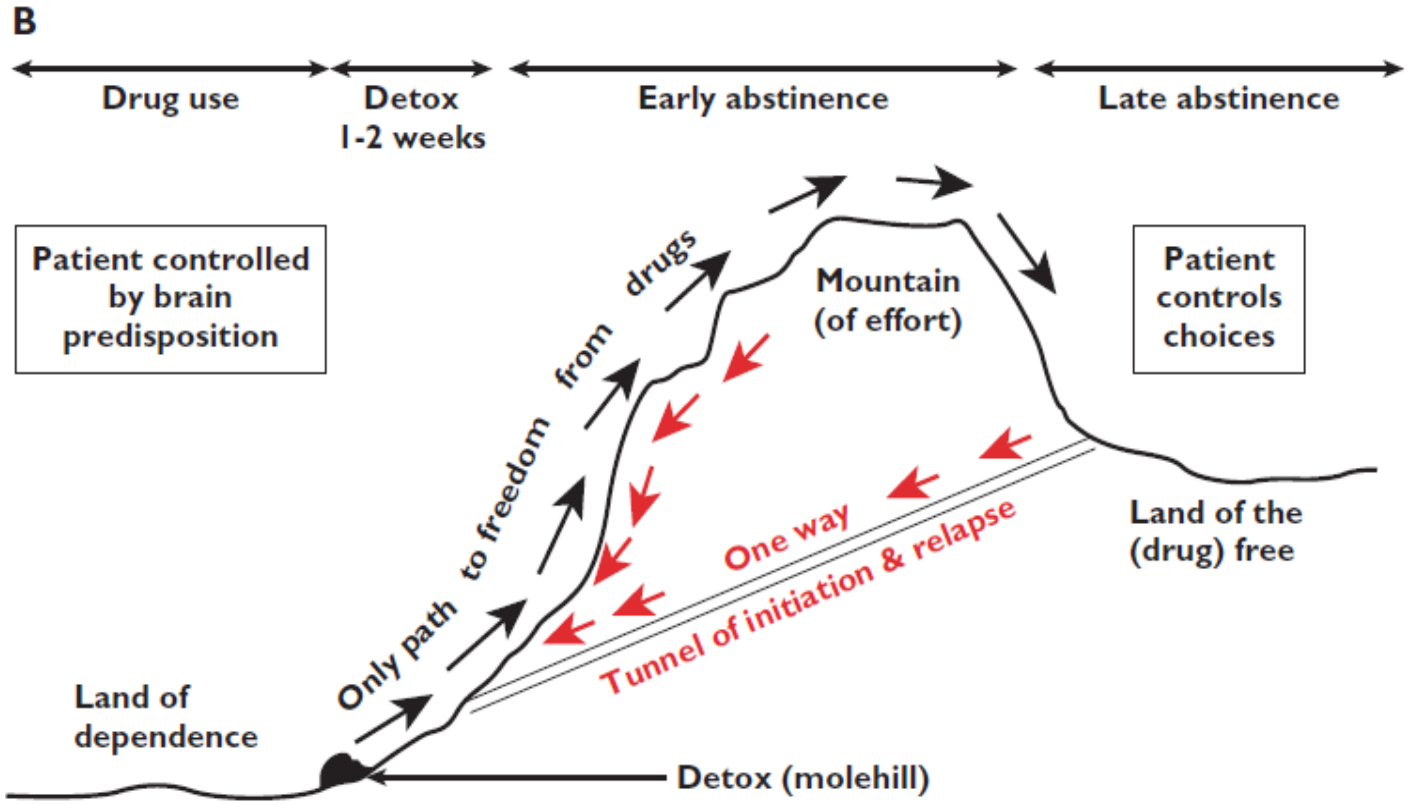
Initial mild to moderate		
opiate craving	anorexia	irritability
anxiety	dysphoria	fatigue
headache	increased respirations	lacrimation
nervousness	muscle twitching	yawning
restlessness	rhinorrhea	pilorection
dilated pupils	sweating	
Advanced		
increased BP	abdominal cramps	hot/cold flashes
increased HR	fever	muscle aches
bone pain	muscle spasms	nausea
vomiting	sensitive to touch	diarrhea
insomnia	weight loss	

(A) The fantasy: How patients (and staff) perceive progress in addiction treatment.



Alison M. et al ,2012

(B) The reality: The road to abstinence



Alison M. et al ,2012

Review

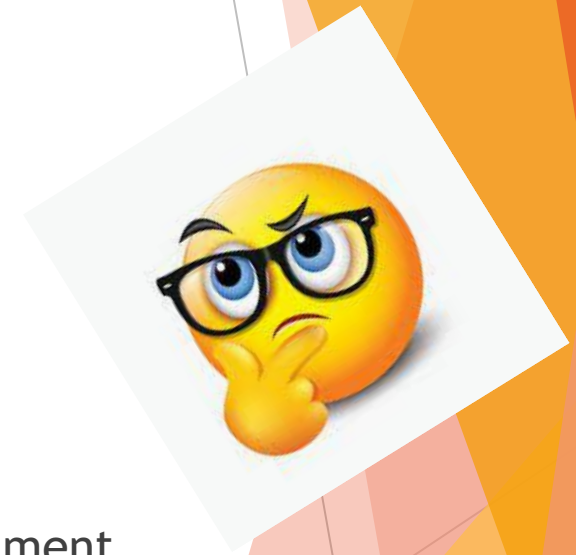
- **Post-Treatment Outcomes of Buprenorphine Detoxification in Community Settings: A Systematic Review**
- Michelle J. Horspool et al,2008
- Reducing buprenorphine regime(3 days to 16 weeks).
- Our preliminary review indicates that buprenorphine is a suitable medication for the process of opiate detoxification but that this newer treatment option has not led to higher rates of abstinence following withdrawal.

Review

- **REVIEW ARTICLE (2006)**
- *Susan E. Robinson*
- **Buprenorphine-Containing Treatments ,Place in the Management of Opioid Addiction**
- Thus, not only is buprenorphine effective in managing opioid detoxification , but it appears to be superior to other detoxification methods using α2-adrenergic agonists and lt opioid receptor antagonists.

Review

- Cochrane review (2009) & (2014)
- **[Intervention Review] Detoxification treatments for opiate dependent adolescents**
- Silvia Minozzi , Laura Amato, Marina Davoli
- Main results:



1. Two trials involving 190 participants were included.
2. One compares buprenorphine with clonidine for detoxification.
3. No difference was found for drop out and acceptability of treatment.
4. More participants in the buprenorphine group initiated naltrexone treatment.
5. The other compares maintenance treatment vs detoxification treatment: buprenorphine-naloxone maintenance vs buprenorphine detoxification. For drop out the results were in favour of maintenance treatment.
6. No differences for use of opiate.

Buprenorphine detoxification

- Agonist or partial agonist half life
- Dose
- Induction
- Tapering (Which kind of regime)

Buprenorphine detoxification

- Non-pharmacological treatment
- Antagonist treatment