

*Brisbane Private Hospital, Saturday 4th November 2017*

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# WHAT'S NEW WITH CANNABIS?

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# THE CANNABIS IS DIFFERENT

- ▶ Strength 5 -> 15% THC all hydroponic
- ▶ Business not homegrown
- ▶ CBD THC Ratio
- ▶ Synthetic product 'Kronic' K2 etc.

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# THE USE IS DIFFERENT

- ▶ How people explain their use - “Self Medicating”
- ▶ Co-evolution of substance use with other psychotic illness
- ▶ Common factors for multifactorial conditions

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## SO WHAT? MAINSTREAM, NOT FRINGE ISSUE

- ▶ Greatest community burden in the illness severely affected as so many more of them
- ▶ Can't use them 'hypothesis'

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# KEY CHANGES

- ▶ **1. Medical Marijuana**

- ▶ - Blurs therapeutic and recreational boundary,
- ▶ So more like opiates than alcohol.

- ▶ **2. Decriminalised**

- ▶ Seen as low-level drug like alcohol, impairment tolerated, implies harm minimisation so have lost the hard line

# DECRIMINALIZED

- ▶ Seen as low level drug like alcohol
- ▶ Impairment tolerated
- ▶ Implies harm-minimisation
- ▶ Hence has lost any clear line

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## 3. INTERNET SUPPLIES

- ▶ Cheap, safe (sort of)
- ▶ Impersonal
- ▶ Support Gateway Theory

## 4. SYNTHETIC PRODUCTS

- ▶ Life-style products
- ▶ Canadian and American Experience



# AVAILABILITY

- ▶ More money = more drugs and alcohol
- ▶ Price signal for drugs & alcohol
- ▶ Mainstream option, not drug use as a fringe identifier

# AWARENESS: DRUG TESTING

- ▶ **A)** cheap \$150 -> \$10
- ▶ Lab confirmation
- ▶ More sophisticated idea of purpose, to catch or deter
- ▶ Change in raw figures “net widening”
- ▶ Cultural effects -Work cover claims down
- ▶ **B)** more difficult to sustain the view that cannabis is harmless

## EFFECT

- ▶ Thirty minutes to maximum effect lasts 3 - 6 hours, detectable for much longer in urine
- ▶ Acute effects can be minimal & undetectable in regular uses
- ▶ Similar to the therapeutic opiate dependant patient
- ▶ Different to the alcohol user

# ACUTE EFFECTS - POSITIVE

- ▶ Relaxation
- ▶ Euphoria
- ▶ Heightened perception
- ▶ Sociability
- ▶ Sensation of slowed time
- ▶ Increased appetite
- ▶ Decreased pain

# ACUTE EFFECTS - NEGATIVE

- ▶ Anxiety
- ▶ Paranoia
- ▶ Decreased short term memory
- ▶ Poor attention and judgement
- ▶ Incoordination and poor balance

# EFFECTS THAT ARE HARD TO MEASURE

- ▶ Reduced motivation - the price of inadequate anxiety
- ▶ Externalised dysregulation of anger and anxiety, road rage/aggression
- ▶ The opportunity cost of wasted time

# PHYSICAL EFFECTS

- ▶ Increased pulse rate - often by 20-50 beats per minute (amplified by alcohol)
- ▶ blood pressure
- ▶ Dry mouth
- ▶ Injected Conjunctivae
- ▶ Bronchial relaxation

# CHRONIC EFFECTS

- ▶ Other medical issues:
- ▶ Respiratory - Complicated by Tobacco
- ▶ **CVS** - Increased mortality of cannabis users after M.I.
- ▶ **GIT** - Cannabis hyperemesis Syndrome
- ▶ **Endocrine** - reduced testosterone with erectile dysfunction and oligospermia.
- ▶ Less consistent picture in women



# CHRONIC EFFECTS

- ▶ Increased anxiety    3 x rate overt disorder
- ▶ Depression - findings inconsistent
- ▶ A-motivational syndrome - likely chronic intoxication and habit
- ▶ ? Learning paradigm significant here?

## CHRONIC EFFECTS IN THESE VULNERABLE TO PSYCHOSIS

- ▶ 8% of schizophrenia due to cannabis
- ▶ Transient exacerbation of symptoms, even if on medication
- ▶ More vulnerable to acute effects than controls
- ▶ Need 3-4 weeks drug free to assess

# MOTIVES

- ▶ Those with major psychotic illness use cannabis for the same reasons as everyone else.
- ▶ Bored/customary means of relaxation/shared social experience/reliable pleasure, not for symptom relief.
- ▶ Undermines the “us and them” hypothesis

# MORE ON PSYCHOSIS

- ▶ **1) Biological Gradient - dose relationship of Cannabis and schizophrenic risk**
- ▶ Adolescent use bringing forward first episode **2.7** years
- ▶ **40%** increased risk of psychosis if ever use cannabis

# MORE ON PSYCHOSIS

- ▶ **2) Don't forget the multiple risk factors associated with schizophrenia**
- ▶ Cannabis use
- ▶ Childhood Trauma
- ▶ Social stressors
- ▶ Malnutrition
- ▶ Low vitamin D prenatally
- ▶ Smoking
- ▶ Low IQ
- ▶ Poor social cognition

# EDUCATION

- ▶ Clear link of onset cannabis use and decline in school performance, conduct-issues, aggression, and poor attitude toward school
- ▶ BUT not so simple - similar affect size for Tobacco
- ▶ Small/inconsistent affect for alcohol even with heavy intake

# EDUCATION

- ▶ **Model of Trajectories of adolescent drug use**
- ▶ Abstainers
- ▶ Occasional
- ▶ Experimental
- ▶ Regular

## WHAT HAPPENED IN COLORADO

- ▶ No increase in number of students still around 20%,
- ▶ Increased intake in regular user group
- ▶ Regular cannabis use strongly associated with regular alcohol intake



## ? PERMANENT COGNITIVE IMPAIRMENT

- ▶ Meier (2012) - suggests early adolescent use lead to loss of 8 IQ points
- ▶ Replicated once but more recent studies suggests confounding factors explain most of this but may be 1 - 3 points loss

## WHAT TO DO?

- ▶ 1) Routine part of history taking and investigations to be routinely done
- ▶ 2) Detoxification - 3 weeks to clarity, little improvement cognitively thereafter (for most)
- ▶ 3) Engagement is management
- ▶ Time to reflect, get perspective
- ▶ Family, school issues
- ▶ Soft anxious avoidant person underneath

# EDUCATIONAL OUTCOME

- ▶ Regular uses