


Institute of Psychiatry at the Maudsley

KING'S COLLEGE LONDON HEALTH PARTNERS

Cannabis as a cause of psychosis.



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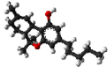
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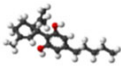
The ingredients of cannabis

Tetrahydrocannabinol (THC) – partial agonist at CB1




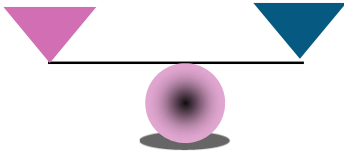
Euphoria
Impairment of attention, memory and learning
Paranoid ideas and hallucinations in high doses

Cannabidiol (CBD)






Is not hallucinogenic
Has anxiety relieving properties
Antagonise effects of THC?

THC **CBD**



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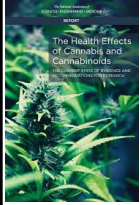
Cannabis use, potency, and cannabis use disorder have increased in adults in States which have legalized Cannabis – Debbie Hasin papers

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Medicinal Cannabis

Indications with RCT evidence:



- Chronic Pain - cannabis
- Intractable Nausea – Nabilone
- Multiple Sclerosis - Spasticity (Sativex THC-CBD) *
- Childhood Epilepsy (Epidiolex - CBD) *

* Sativex and Epidiolex are very expensive

Indications without RCT evidence:

Almost everything – including Opioid addiction, depression, anxiety, PTSD, insomnia, COVID

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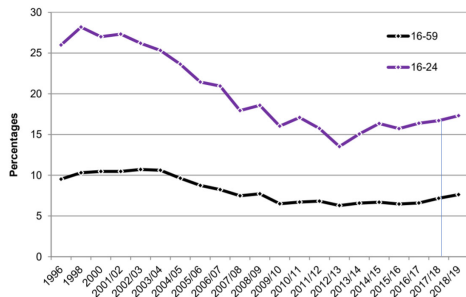
What has happened in UK since legalization for medicinal use - November 2018?

1. About 800 NHS prescriptions per year for licensed medications eg sativex, epidiolex
2. 5 NHS prescriptions for unlicensed products
3. About 60 private prescriptions in 2019 rising to estimated 240 in 2020

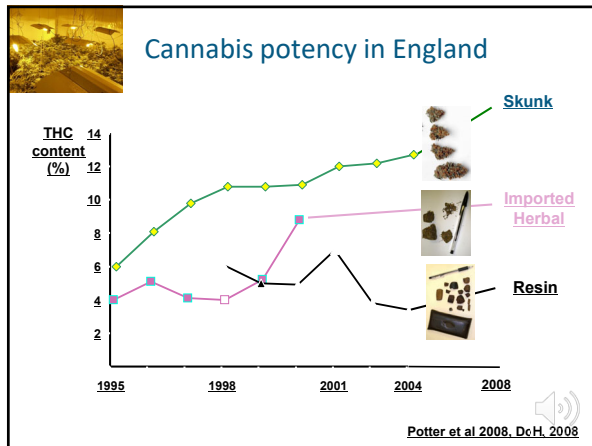


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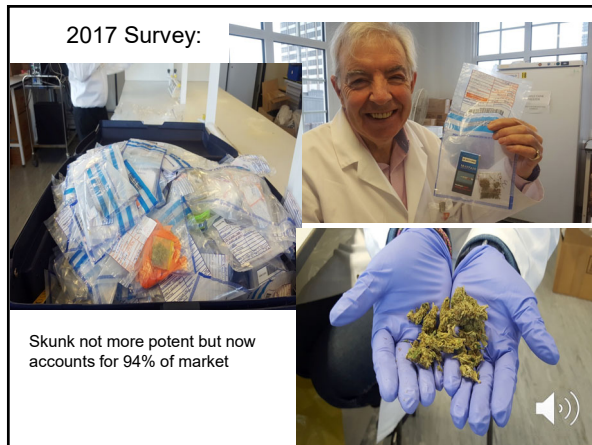
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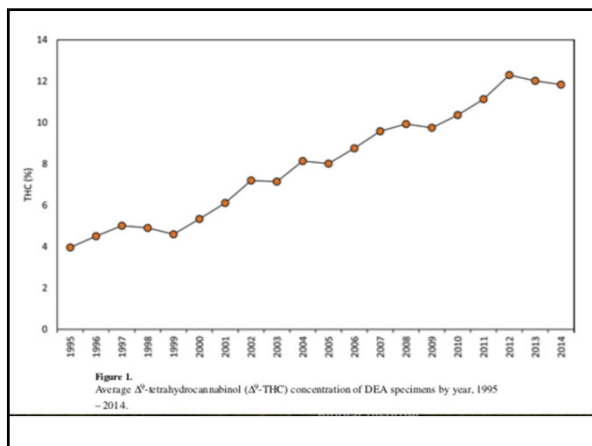
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The ingredients of cannabis

THC causes
 Impairment of attention, memory and learning
 Paranoid ideas and hallucinations in high doses

Cannabidiol (CBD)
 Is not hallucinogenic
 Has anxiety relieving properties
 No adverse effect on cognition

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Cannabis Dependence

Loss of control

Craving – often exacerbated by concomitant use of tobacco

Tolerance – lots of evidence

Withdrawal – not immediate because cannabis can still be detected for up to a month

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Cannabis potency and dependence in the Netherlands

Cannabis potency (THC)

Cannabis treatment

| Year | THC (%) | Treatment Entry /100,000 inhabitants |
|------|---------|--------------------------------------|
| 2000 | 8 | 7 |
| 2001 | 10 | 8 |
| 2002 | 12 | 10 |
| 2003 | 15 | 12 |
| 2004 | 18 | 15 |
| 2005 | 20 | 18 |
| 2006 | 18 | 16 |
| 2007 | 16 | 14 |
| 2008 | 15 | 13 |
| 2009 | 18 | 16 |
| 2010 | 22 | 20 |
| 2011 | 25 | 23 |
| 2012 | 20 | 18 |
| 2013 | 18 | 16 |
| 2014 | 15 | 13 |
| 2015 | 14 | 12 |

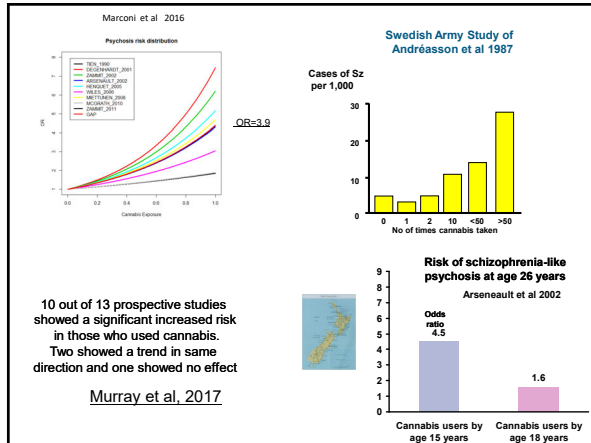
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Possible but not Definite Risks

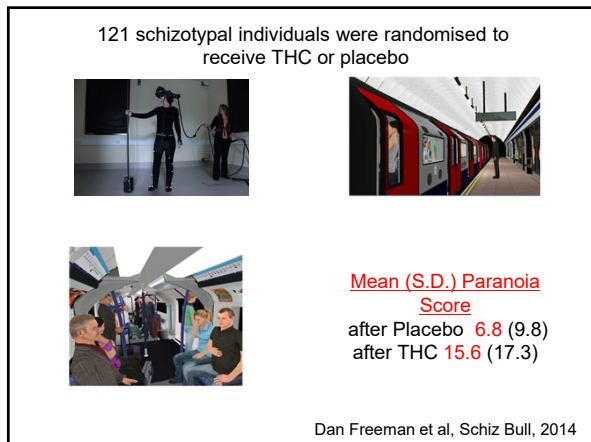
- Cognitive impairment – stoners
- Increased risk of depression and suicide?
- Increased risk of anxiety/PTSD?
- Increased risk of violence – yes but is it only through paranoia



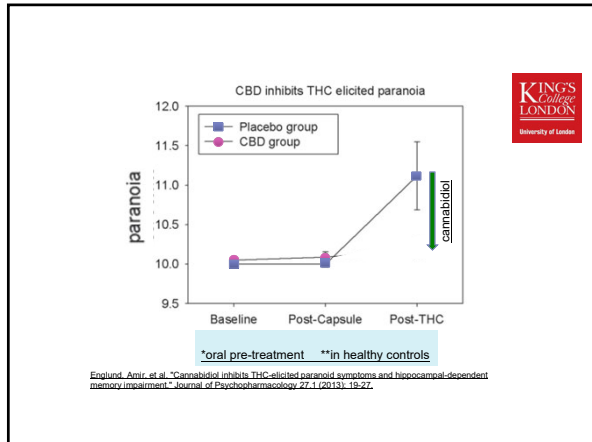
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Continued Versus Discontinued Cannabis Use in Patients with Psychosis

Continued cannabis use after onset of psychosis predicts adverse outcome, including higher relapse rates, longer hospital admissions, and more severe positive symptoms than for individuals who discontinue cannabis use and those who are non-users.

Especially bad outcome for those who continue high potency cannabis

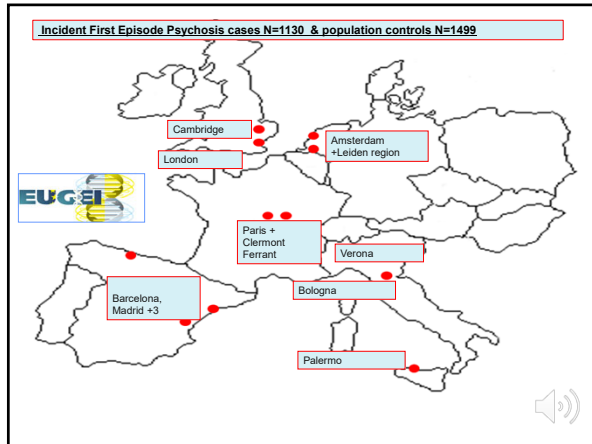
META-ANALYSIS

SCHOELER, T ET AL LANCET PSYCHIATRY, 2016, 3, 215-225

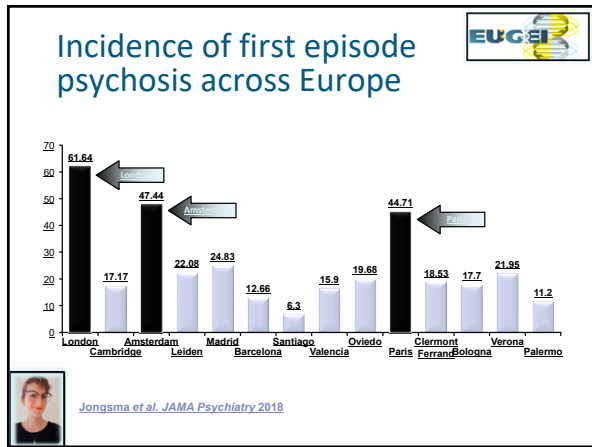
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Does the frequency and potency of cannabis have any effect on the incidence of psychosis?

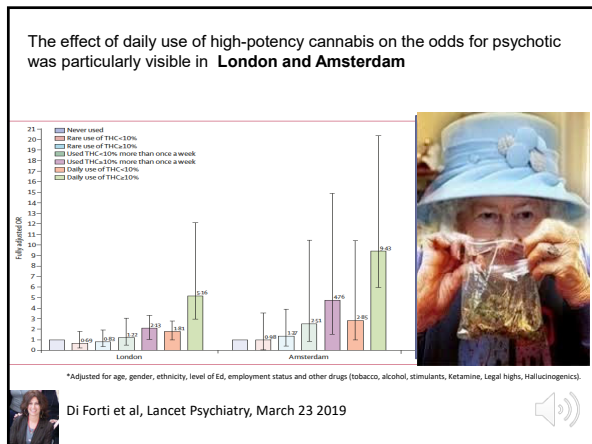
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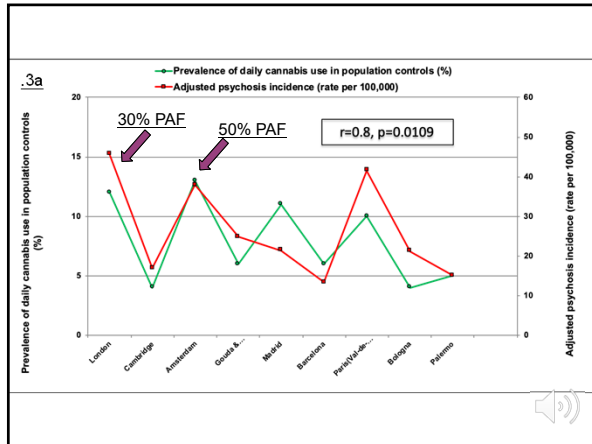
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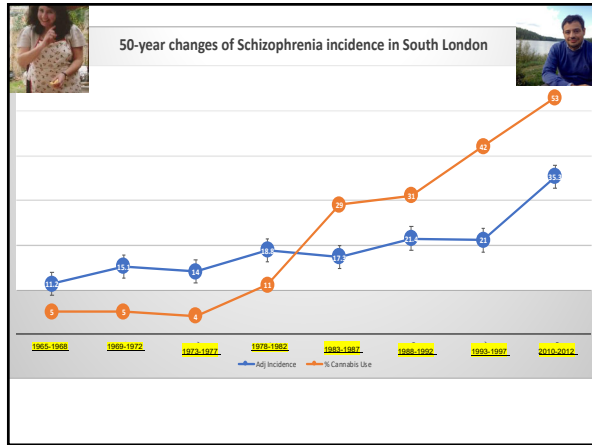
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Changes in Incidence of psychosis over time

1. The incidence of cannabis-induced psychosis more than doubled in Denmark between 2006 and 2016 - Hjorthøj et al, 2019
2. Cannabis was decriminalized in Portugal in 2001. From 2002 till 2015, the proportion of psychosis patients diagnosed as cannabis dependent rose from less than 1% to over 10%

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Synthetic cannabinoids much more risky



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So what should we do?



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