

Cannabis, Cognition and Mental Health in Young People

Professor Mary Cannon

Department of Psychiatry

RCSI University of Medicine and Health Sciences

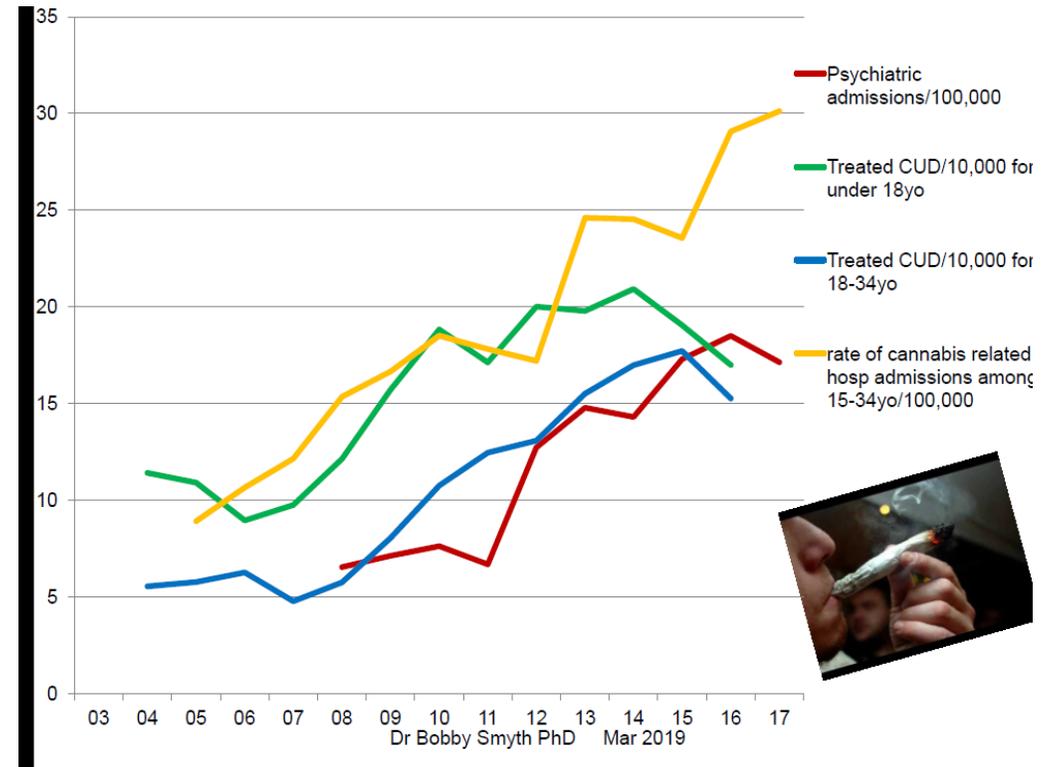
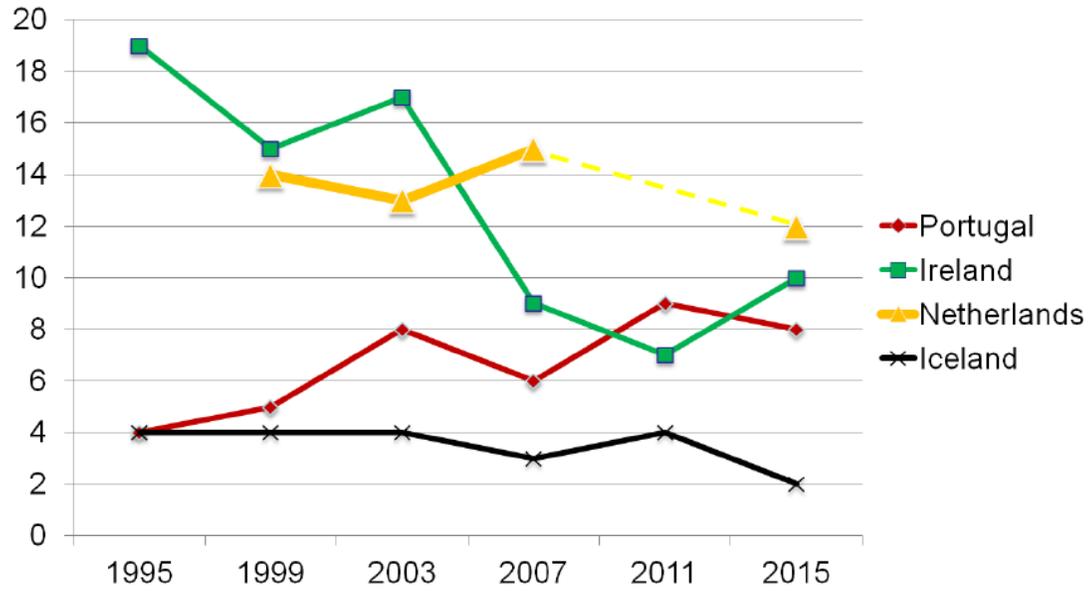
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AND HEALTH
SCIENCES

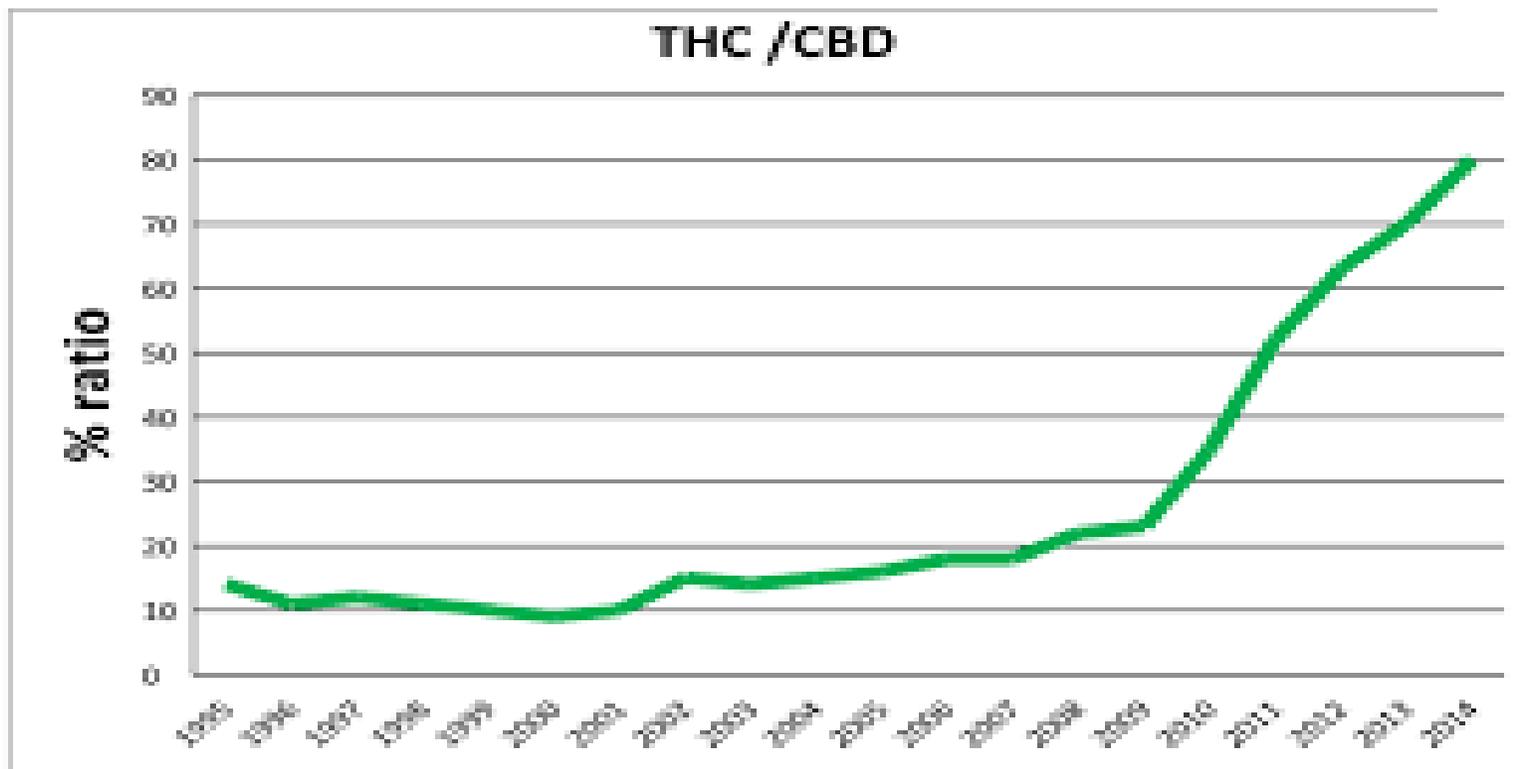
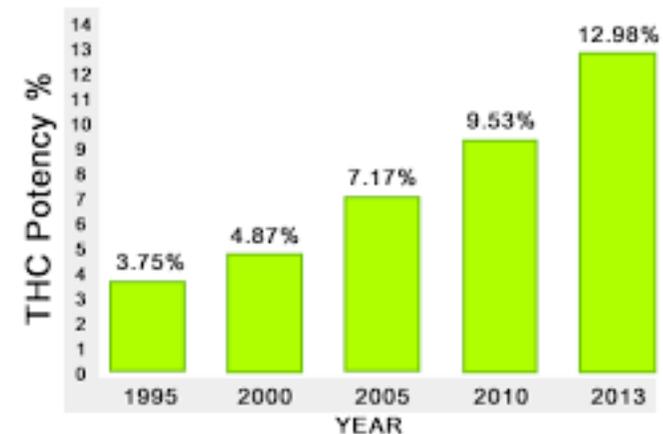
Past Month Cannabis Use- ESPAD '95 to '15

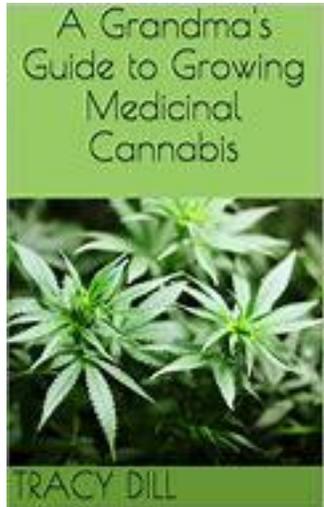




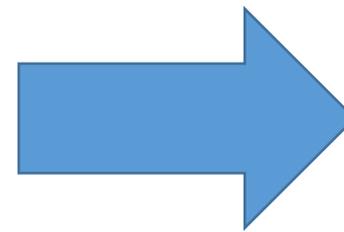
Potency is increasing

THC Potency in Seized Marijuana





Side Effects of THC



- Psychosis
- Depression
- Anxiety
- Suicidal thoughts
- Suicide attempts
- Dependence
- Cognitive Impairment

Teen Use Post Recreational Marijuana Legalisation

- **Coley et al (2020) , Anderson et al (2019)**

Youth Risk Behaviour Survey. (1999-2017)

No increase in past month adolescent use post RML

But did not include Oregon or Washington and of 6 states included 5 had RML in 2016 or 2017

Anderson compared RML with MML

- **Cerda (2020) *National Survey of Drug Use and Health (2008-2016)***

Colorado, Oregon, Alaska and Washington

Increase in Cannabis Use Disorder (25% increase) 12-17 year olds post RML

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“The study’s findings suggest that although marijuana legalization advanced social justice goals, the small post-RML increase in risk for CUD among respondents aged 12 to 17 years and increased frequent use and CUD among adults 26 years or older in this study are a potential public health concern”

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Past Month Marijuana Use by Age Category and State 2016-17
 RED: recreational marijuana state GREEN: medi-marijuana state

Order	State	12-17	State	18-25	State	26+
	Total U.S.	6.5%	Total U.S.	21.5%	Total U.S.	7.6%
1	Vermont	10.7%	Vermont	38.8%	Oregon	18.1%
2	Oregon	10.3%	District of Columbia	34.9%	Vermont	15.9%
3	Maine	9.9%	Maine	34.4%	Alaska	15.0%
4	New Mexico	9.7%	Oregon	33.2%	Colorado	14.8%
5	Rhode Island	9.5%	Rhode Island	31.9%	District of Columbia	14.3%
6	Colorado	9.0%	Colorado	31.7%	Washington	14.3%
7	Washington	9.0%	Connecticut	30.4%	Maine	13.9%
8	Massachusetts	8.9%	Massachusetts	30.3%	Rhode Island	13.5%
9	Alaska	8.8%	New Hampshire	28.9%	Montana	11.5%
10	Nevada	8.8%	Washington	26.5%	Massachusetts	10.9%
11	Montana	8.8%	Alaska	26.3%	New Hampshire	10.9%
12	New Hampshire	8.6%	Maryland	26.2%	New Mexico	10.2%
13	District of Columbia	8.3%	Nevada	25.9%	Nevada	10.1%
14	Connecticut	7.9%	Montana	25.1%	Michigan	9.9%
15	Michigan	7.7%	New Mexico	24.4%	California	9.7%
16	Florida	7.5%	Michigan	24.2%	Maryland	8.7%
17	Delaware	7.5%	California	24.1%	Delaware	8.2%
18	Maryland	7.1%	Delaware	23.7%	Connecticut	7.7%
19	California	6.9%	Illinois	23.5%	Indiana	7.6%
20	Illinois	6.9%	New York	23.3%	New York	7.5%
21	New York	6.7%	Florida	22.4%	Arkansas	7.2%
22	Hawaii	6.5%	New Jersey	22.3%	Missouri	7.1%
23	Indiana	6.5%	Pennsylvania	21.4%	Hawaii	7.1%
24	Idaho	6.3%	Ohio	21.3%	Florida	6.9%
25	Ohio	6.3%	Indiana	20.7%	Arizona	6.8%
26	Arizona	6.3%	Tennessee	19.5%	Ohio	6.8%
27	North Carolina	6.0%	Minnesota	19.1%	Illinois	6.7%
28	Kentucky	6.0%	Arizona	19.1%	Pennsylvania	6.5%
29	Nebraska	6.0%	North Carolina	19.0%	West Virginia	6.4%
30	South Dakota	5.9%	Wisconsin	18.8%	Tennessee	6.4%
31	Wisconsin	5.9%	Louisiana	18.8%	Kentucky	6.4%
32	Minnesota	5.8%	Nebraska	18.8%	Idaho	6.4%
33	Arkansas	5.8%	Missouri	18.6%	North Carolina	6.4%
34	Missouri	5.8%	Virginia	18.5%	Wisconsin	6.3%
35	Wyoming	5.8%	South Carolina	18.4%	Minnesota	6.1%
36	Tennessee	5.7%	Georgia	18.4%	Louisiana	6.0%
37	Louisiana	5.7%	South Dakota	18.3%	Nebraska	6.0%
38	Pennsylvania	5.6%	Hawaii	17.4%	Wyoming	5.8%
39	Virginia	5.5%	Kentucky	17.4%	Mississippi	5.7%
40	South Carolina	5.5%	Iowa	17.3%	South Dakota	5.4%
41	West Virginia	5.4%	West Virginia	16.9%	Oklahoma	5.4%
42	Georgia	5.4%	Oklahoma	16.8%	Virginia	5.3%
43	Oklahoma	5.4%	Wyoming	16.5%	Kansas	5.1%
44	Alabama	5.3%	Alabama	16.5%	New Jersey	5.0%
45	Kansas	5.2%	Idaho	16.1%	South Carolina	5.0%
46	New Jersey	5.2%	Kansas	16.0%	Georgia	5.0%
47	Iowa	5.1%	Arkansas	16.0%	North Dakota	4.9%
48	Mississippi	5.0%	Mississippi	15.8%	Iowa	4.9%
49	North Dakota	5.0%	Utah	14.7%	Alabama	4.9%
50	Texas	4.9%	Texas	14.6%	Utah	4.6%
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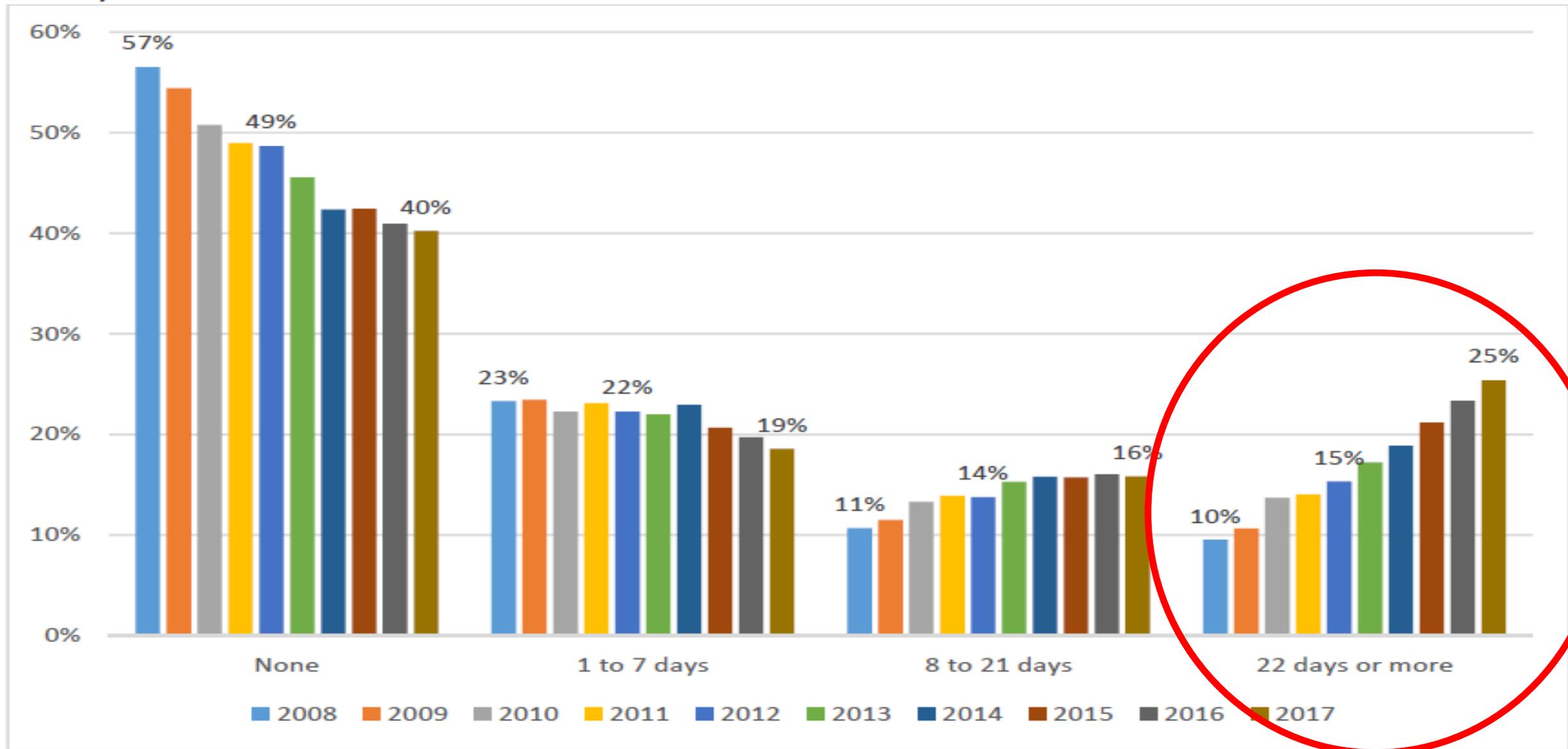
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016-2017

Past Month Marijuana Use by Age Category and State 2016-17

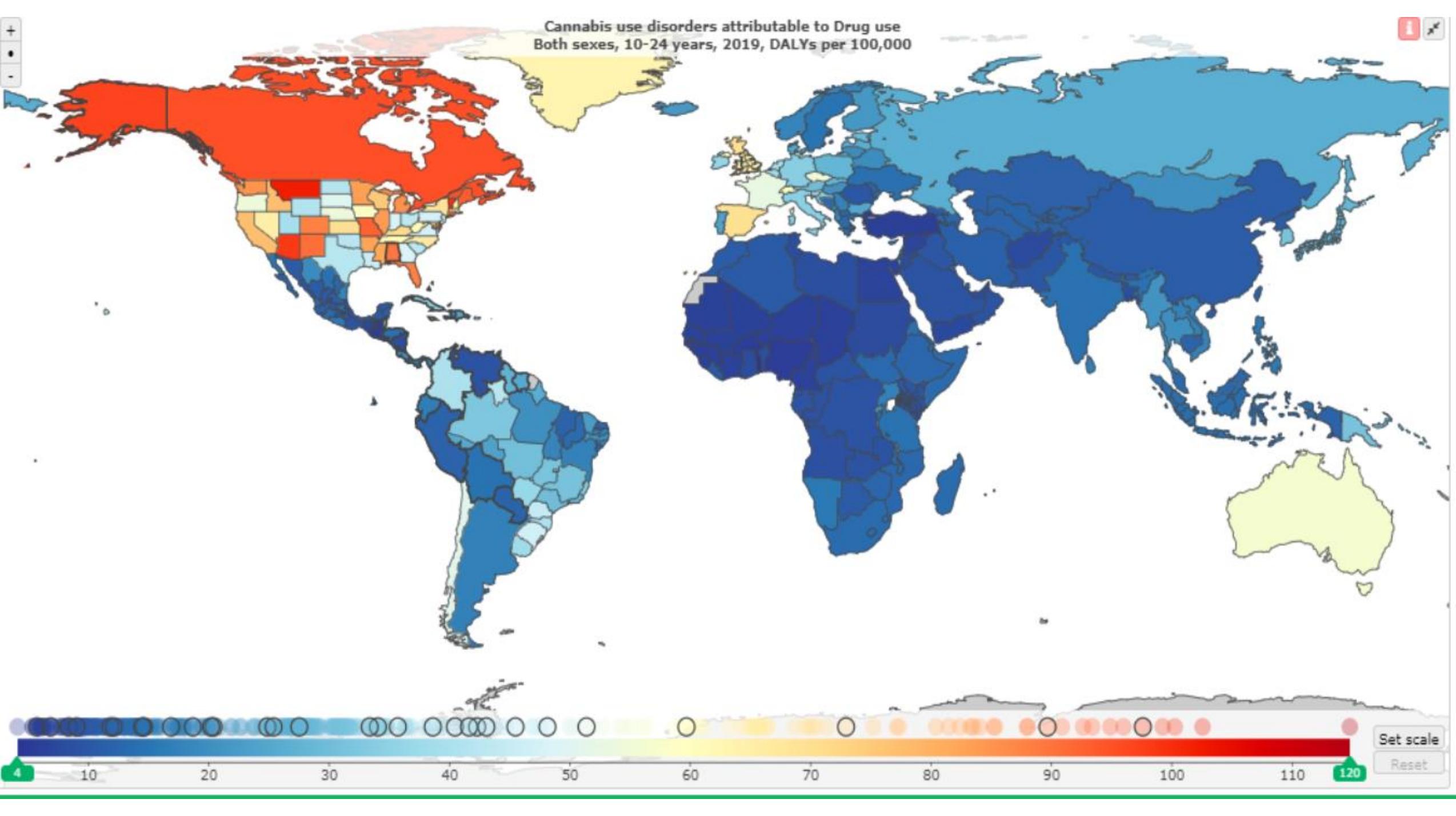
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Figure 54. Percent of clients who reported marijuana use in past 30-days, by number of reported days of use, 2008–2017



Cannabis use disorders attributable to Drug use
Both sexes, 10-24 years, 2019, DALYs per 100,000



Twin Studies show that cannabis is a gateway drug



Lynskey et al (2003) JAMA

In an Australian sample of same sex twin - Twin who used cannabis by age 17 had odds of other drug use that were 2-5 times higher than the co-twin who did not use cannabis by age 17

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Lynskey, Vink, and Boomsma

Table 1. Drug Use Outcomes in Twin Pairs Discordant for Cannabis Use before Age 18 (234 pairs)

	Lifetime prevalence		Odds ratios (95% CI)		
	Early cannabis users (%)	Co-twins (%)	Unadjusted	Adjusted	Significant covariates ^a
Use					
Party drugs	16.2	3.8	6.8 (2.7-17.4)	7.4 (2.3-23.4)	1
Hard drugs	12.8	1.7	14.0 (3.3-58.8)	16.5 (2.4-111.3)	1
Any party/Hard drug use	17.9	4.3	6.3 (2.7-15.0)	6.5 (2.4-17.9)	1
Regular use					
Cannabis	16.2	5.1	4.7 (2.1-10.6)	1.3 (.3-5.1)	1,2

^aSignificant covariates: 1 = rule breaking behavior (wave 5); 2 = early regular tobacco use.

A Cotwin-Control Analysis of Drug Use and Abuse/Dependence Risk associated with Early-onset Cannabis Use

Julia D. Grant, Ph.D.^{*,a}, Michael T. Lynskey, Ph.D.^a, Jeffrey F. Scherrer, Ph.D.^{b,a}, Arpana Agrawal, Ph.D.^a, Andrew C. Heath, D.Phil.^a, and Kathleen K. Bucholz, Ph.D.^a

^aMidwest Alcoholism Research Center at Washington University and the Department of Psychiatry, Washington University School of Medicine, 660 S. Euclid, Campus Box 8134, St. Louis, MO 63110, USA

^b St. Louis Veterans Administration Medical Center, Research Service (151-JC), 915 North Grand Blvd., St. Louis, MO 63106, USA

Abstract

We assessed whether, after controlling for genetic and shared environmental influences, early cannabis use remains a significant predictor of other drug use, abuse, and dependence, and whether the risk for early users is greater than that for later cannabis users. Data from a 1992 telephone diagnostic interview of 8169 male twins ($M = 42.0$ years at interview) who served in the U.S. military during the Vietnam-era were used to identify a subsample of 293 monozygotic (MZ) and dizygotic (DZ) twin pairs discordant for early cannabis use (before age 18). Using cotwin-control analyses, outcomes assessed were: lifetime illegal drug use (stimulant/cocaine, sedative, opiate, and hallucinogen/PCP), lifetime DSM-III-R illegal drug abuse/dependence, and lifetime DSM-III-R alcohol dependence. After controlling for covariates, early cannabis users were at greater risk than their later/never-using cotwins for 8 of 9 substance-related comparisons, including: using other illegal drugs (ORs: 2.71-4.09), having illegal drug abuse/dependence (ORs: 2.02-2.13), and developing alcohol dependence (OR=2.36). When analyses were limited to pairs in which the cotwin used cannabis later, early and later users only differed significantly on sedative, opiate, and hallucinogen use. After familial influences on early cannabis use were controlled for, cannabis use—regardless of the age of initiation—still conferred increased risk of other illegal drug use, drug abuse/dependence, and alcohol dependence. In contrast to previous research, there is limited evidence for increased risk associated with early-onset use in this sample of Vietnam-era veterans.

Early Onset Cannabis Use and Progression to other Drug Use in a Sample of Dutch Twins

Michael T. Lynskey,^{1,3} Jacqueline M. Vink,² and Dorret I. Boomsma²

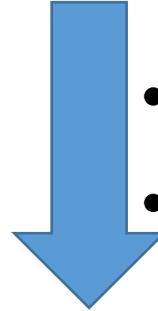
Received 2 Feb. 2005—Final 16 Aug. 2005

One possible explanation of the commonly reported associations between early onset

Poor outcomes following adolescent cannabis use



- School dropout
- Poor educational outcomes
- Poor occupational outcomes
- Increased welfare usage
- Lower socio-economic group
- Poor relationship satisfaction
- Financial difficulties
- Traffic offences



- High school graduation
- College Graduation

Poor outcomes post cannabis use

Addiction



RESEARCH REPORT

doi:10.1111/j.1360-0443.2008.02221.x

Cannabis use and later life outcomes

David M. Fergusson & Joseph M. Boden

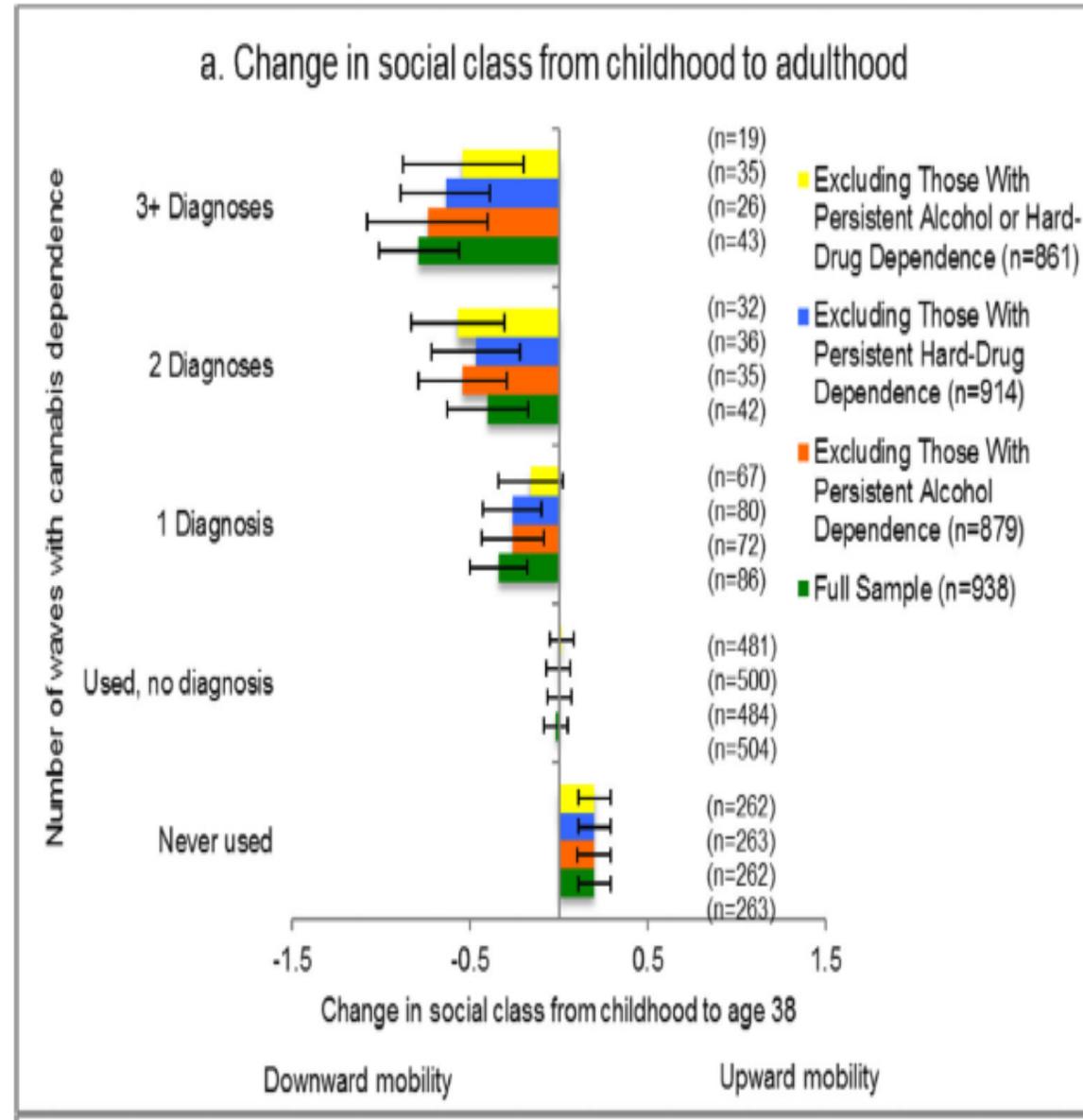
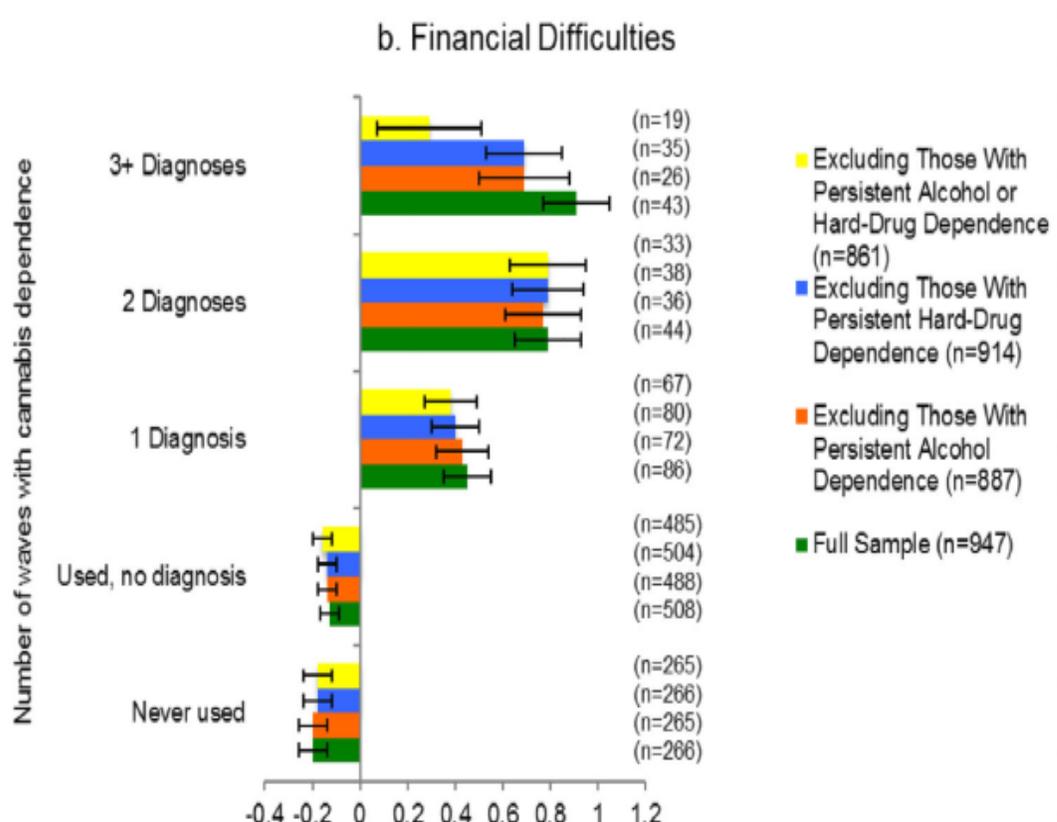
University of Otago, Christchurch School of Medicine and Health Sciences, New Zealand

ABSTRACT

Aim To examine the associations between the extent of cannabis use during adolescence and young adulthood and later education, economic, employment, relationship satisfaction and life satisfaction outcomes. **Design** A longitudinal study of a New Zealand birth cohort studied to age 25 years. **Measurements** Measures of: cannabis use at ages 14–25; university degree attainment to age 25; income at age 25; welfare dependence during the period 21–25 years; unemployment 21–25 years; relationship quality; life satisfaction. Also, measures of childhood socio-economic disadvantage, family adversity, childhood and early adolescent behavioural adjustment and cognitive ability and adolescent and young adult mental health and substance use. **Findings** There were statistically significant bivariate associations between increasing levels of cannabis use at ages 14–21 and: lower levels of degree attainment by age 25 ($P < 0.0001$); lower income at age 25 ($P < 0.01$); higher levels of welfare dependence ($P < 0.0001$); higher unemployment ($P < 0.0001$); lower levels of relationship satisfaction ($P < 0.001$); and lower levels of life satisfaction ($P < 0.0001$). These associations were adjusted for a range of potentially confounding factors including: family socio-economic background; family functioning; exposure to child abuse; childhood and adolescent adjustment; early adolescent academic achievement; and comorbid mental disorders and substance use. After adjustment, the associations between increasing cannabis use and all outcome measures remained statistically significant ($P < 0.05$). **Conclusions** The

Persistent cannabis dependence and alcohol dependence represent risks for midlife economic and social problems: A longitudinal cohort study

Magdalena Cerdá, Dr.P.H.^{1,2}, Terrie E. Moffitt, Ph.D.^{3,4,5}, Madeline H. Meier, Ph.D.⁶, HonaLee Harrington, B.A.^{3,4}, Renate Houts, Ph.D.^{3,4}, Sandhya Ramrakha, Ph.D.⁷, Sean Hogan, M.S.W.⁷, Richie Poulton, Ph.D.⁷, and Avshalom Caspi, Ph.D.^{3,4,5}



Trajectories of adolescent alcohol and cannabis use into young adulthood

George C. Patton¹, Carolyn Coffey¹, Michael T. Lynskey², Sophie Reid¹, Sheryl Hemphill¹, John B. Carlin³ & Wayne Hall⁴

Centre for Adolescent Health, Murdoch Children's Research Institute, Royal Children's Hospital, University of Melbourne, Victoria, Australia,¹ Department of Psychiatry, Washington University School of Medicine, St Louis, MO, USA,² Clinical Epidemiology and Biostatistics Unit, Murdoch Children's Research Institute and Department of Paediatrics, University of Melbourne, Victoria, Australia³ and Office of Public Policy and Ethics, Institute for Molecular Bioscience, University of Queensland, St Lucia QLD, Australia⁴

ABSTRACT

Background Both alcohol and cannabis use carry health risks. Both are commonly initiated in adolescence. To date little research has described trajectories of adolescent cannabis or alcohol use or compared their respective consequences in young adulthood. **Methods** The design was a 10-year eight-wave cohort study of a state-wide community sample of 1943 Victorians initially aged 14–15 years. Moderate- and high-risk alcohol use was defined according to total weekly alcohol consumption. Moderate- and high-risk cannabis use were defined as weekly and daily use, respectively. **Results** Around 90% of young adults used either alcohol or cannabis. Although an association existed between alcohol and cannabis use, there was a tendency for heavy users to use one substance predominantly at any one time. Weekly or more frequent cannabis use in the absence of moderate-risk alcohol use in teenagers predicted a sevenfold higher rate of daily cannabis use in young adults but only a twofold increase in high-risk alcohol use. Conversely, moderate-risk adolescent alcohol use in the absence of weekly cannabis predicted an approximately threefold increased rate of both high-risk drinking and daily cannabis use in young adulthood. Selective heavy cannabis use in both adolescence and young adulthood was associated with greater illicit substance use and poorer social outcomes in young adulthood than selective alcohol use. **Conclusions** Heavier teenage cannabis users tend to continue selectively with cannabis use. Considering their poor young adult outcomes, regular adolescent cannabis users appear to be on a problematic trajectory.



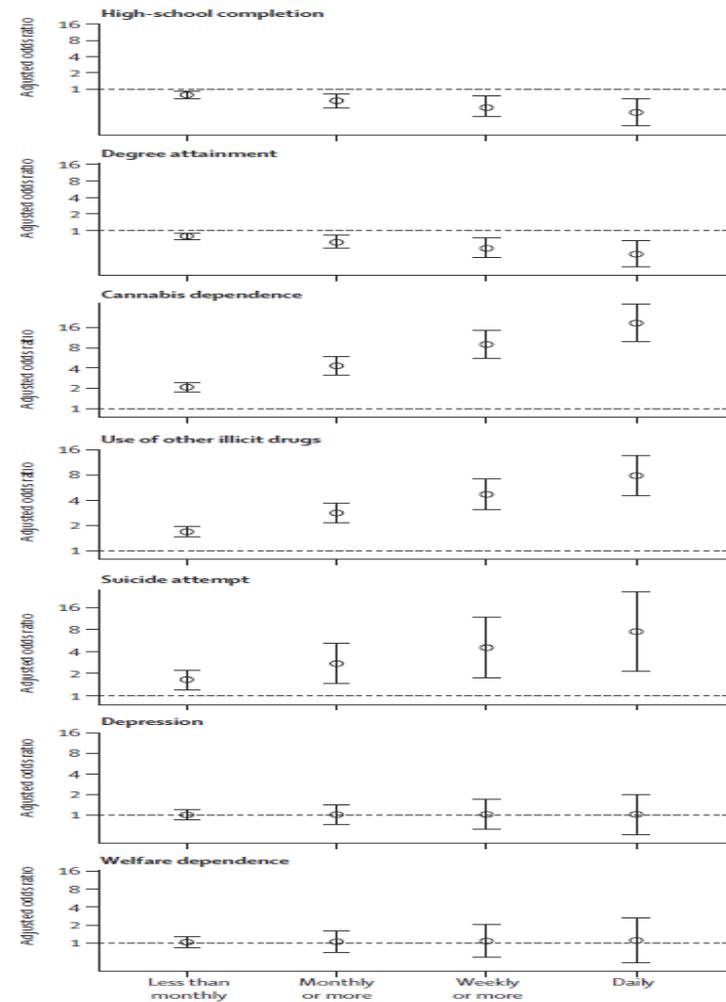
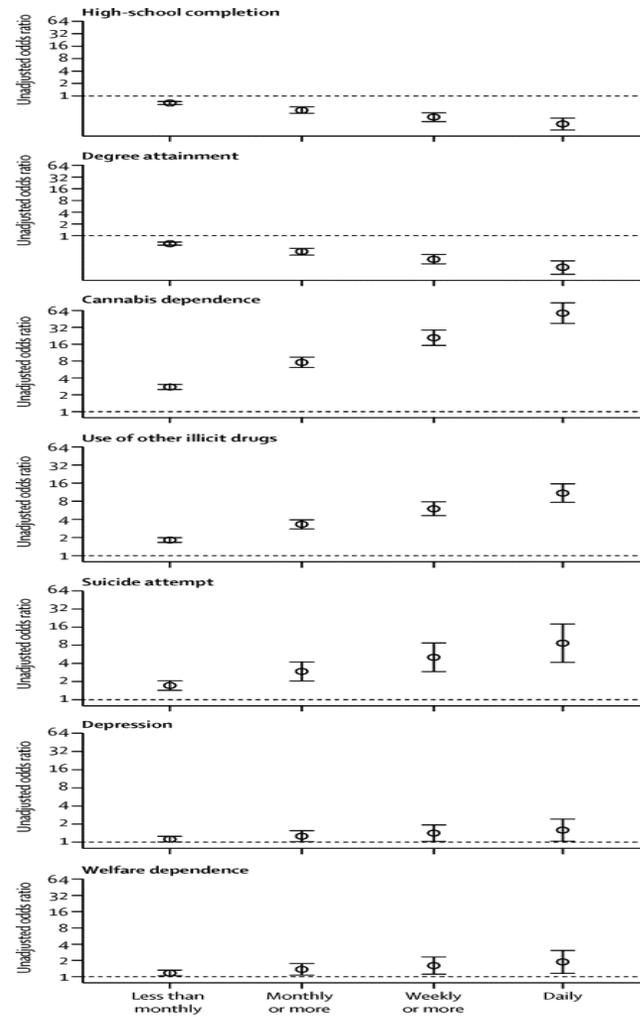
Young adult sequelae of adolescent cannabis use: an integrative analysis

Edmund Silins, L John Horwood, George C Patton, David M Fergusson, Craig A Olsson, Delyse M Hutchinson, Elizabeth Spry, John W Toumbourou, Louisa Degenhardt, Wendy Swift, Carolyn Coffey, Robert J Tait, Primrose Letcher, Jan Copeland, Richard P Mattick, for the Cannabis Cohorts Research Consortium*

Summary

Lancet Psychiatry 2014; 1: 286-93

Background Debate continues about the consequences of adolescent cannabis use. Existing data are limited in statistical power to examine rarer outcomes and less common, heavier patterns of cannabis use than those already



A natural experiment...

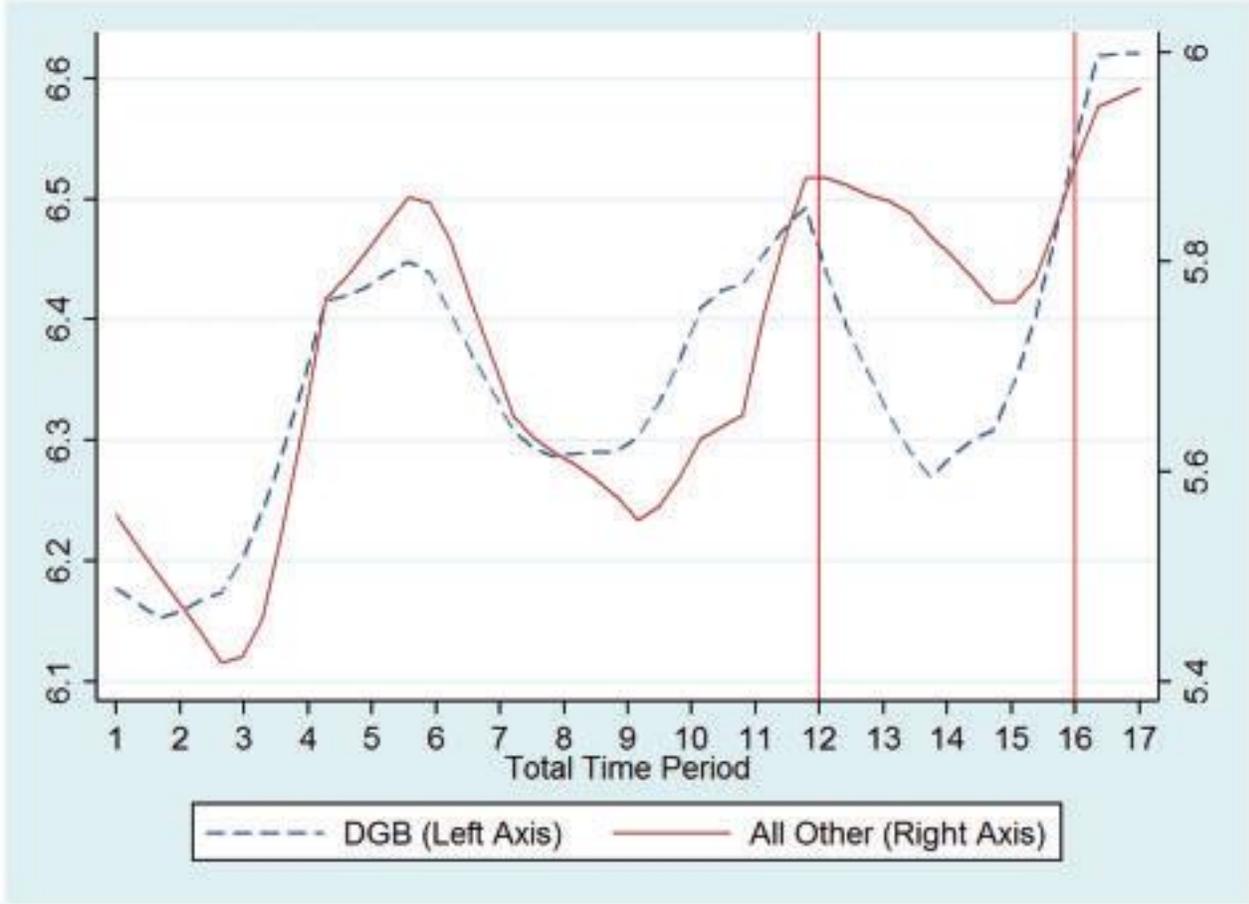
Vanaf 1 oktober 2011 gaan de Maastrichtse coffeeshops het buurlandcriterium toepassen
 À partir du 1^{er} octobre 2011 les coffeeshops maastrichtoises (VOCM) appliqueront le critère dit des pays limitrophes
 Ab 1 Oktober 2011 werden die Maastrichter Coffeeshops (VOCM) das Nachbarlandkriterium umsetzen
 Starting from 1 October 2011 the 'neighbouring country criterion' will be applied in the Maastricht coffeeshops (VOCM)

JA	NON
OUI	NEIN
YES	NO
NEDERLAND	FRANCE
BELGIË	LUXEMBOURG
BELGIQUE	AND ALL OTHER COUNTRIES
DEUTSCHLAND	

En clair, cela signifie que seuls seront admis dans les coffeeshops maastrichtoises les personnes âgées d'au moins 18 ans et résidant soit aux Pays-Bas, soit dans l'un de nos pays limitrophes, à savoir la Belgique et l'Allemagne.

Ab 1. OKTOBER 2011 werden nur die Einwohner der Nachbarländer Deutschland und Belgien, die aber auch von einem dieser Länder in unmittelbarer Grenzregion wohnen, noch zugelassen. Es ist jedoch ab diesem Datum Besuchern aus Frankreich, Luxemburg und allen anderen Ländern nicht mehr möglich, Zutritt zu den Maastrichter Coffeeshops zu erhalten.

This means that admission will be restricted to residents of the Netherlands, Belgium and Germany, aged 18 years and over. Coffeeshop visitors must be in possession at all times of valid Dutch, German or Belgian proof of identity.



High” Achievers? Cannabis Access and Academic Performance
 Marie and Zolitz (2017)

Intelligence quotient decline following frequent or dependent cannabis use in youth: a systematic review and meta-analysis of longitudinal studies

Emmet Power¹ , Sophie Sabherwal¹, Colm Healy¹, Aisling O' Neill^{1,2},
David Cotter¹ and Mary Cannon^{1,2}

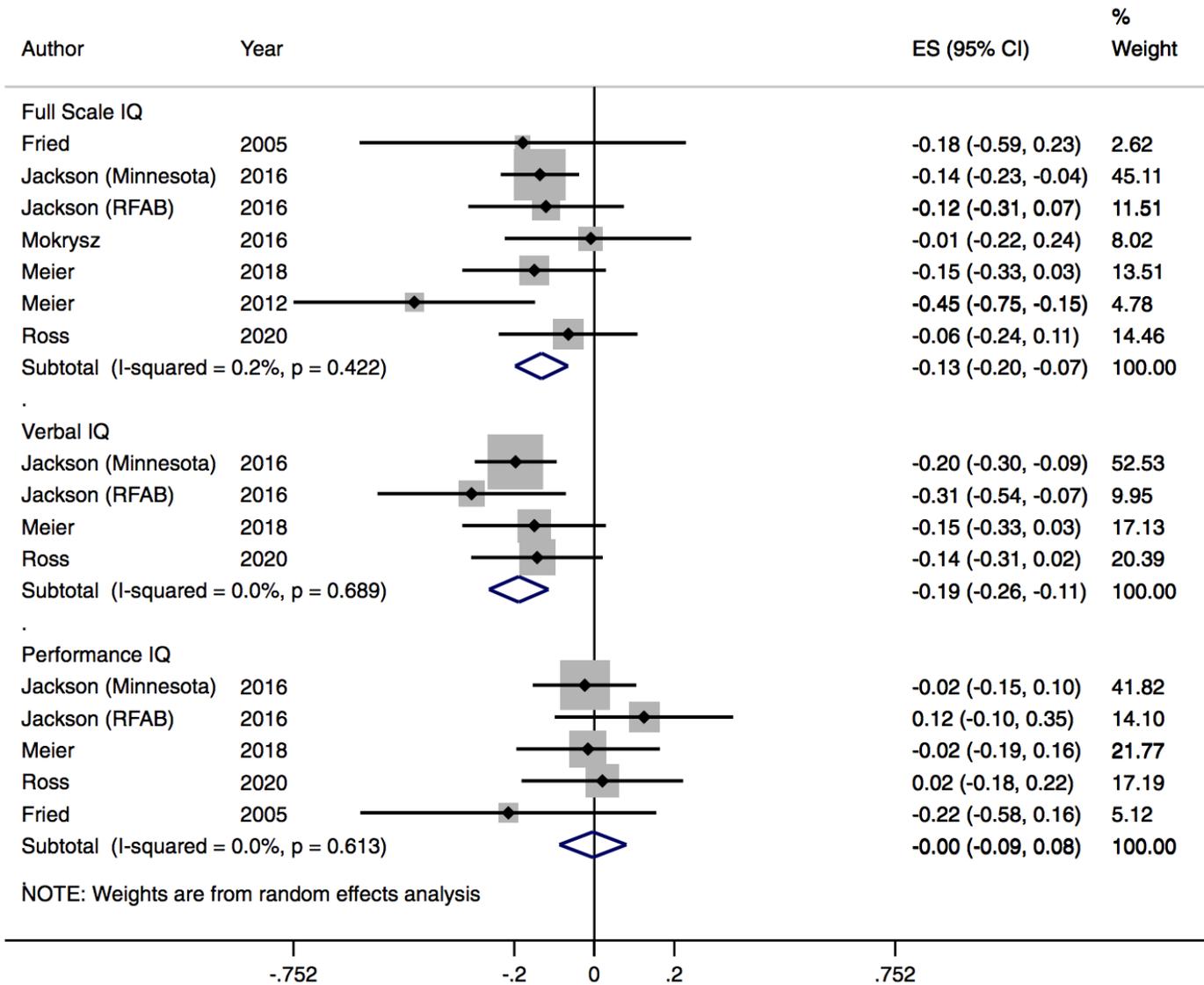
¹Department of Psychiatry, Royal College of Surgeons in Ireland, Education and Research Centre, Beaumont Hospital, Dublin 9, Ireland and ²Trinity College Institute of Neuroscience, Trinity College Dublin, Dublin 2, Ireland

In Press, Psychological Medicine

Systematic review of 7 longitudinal studies with baseline measure of IQ in adolescence prior to cannabis use

Table 1. Study characteristics

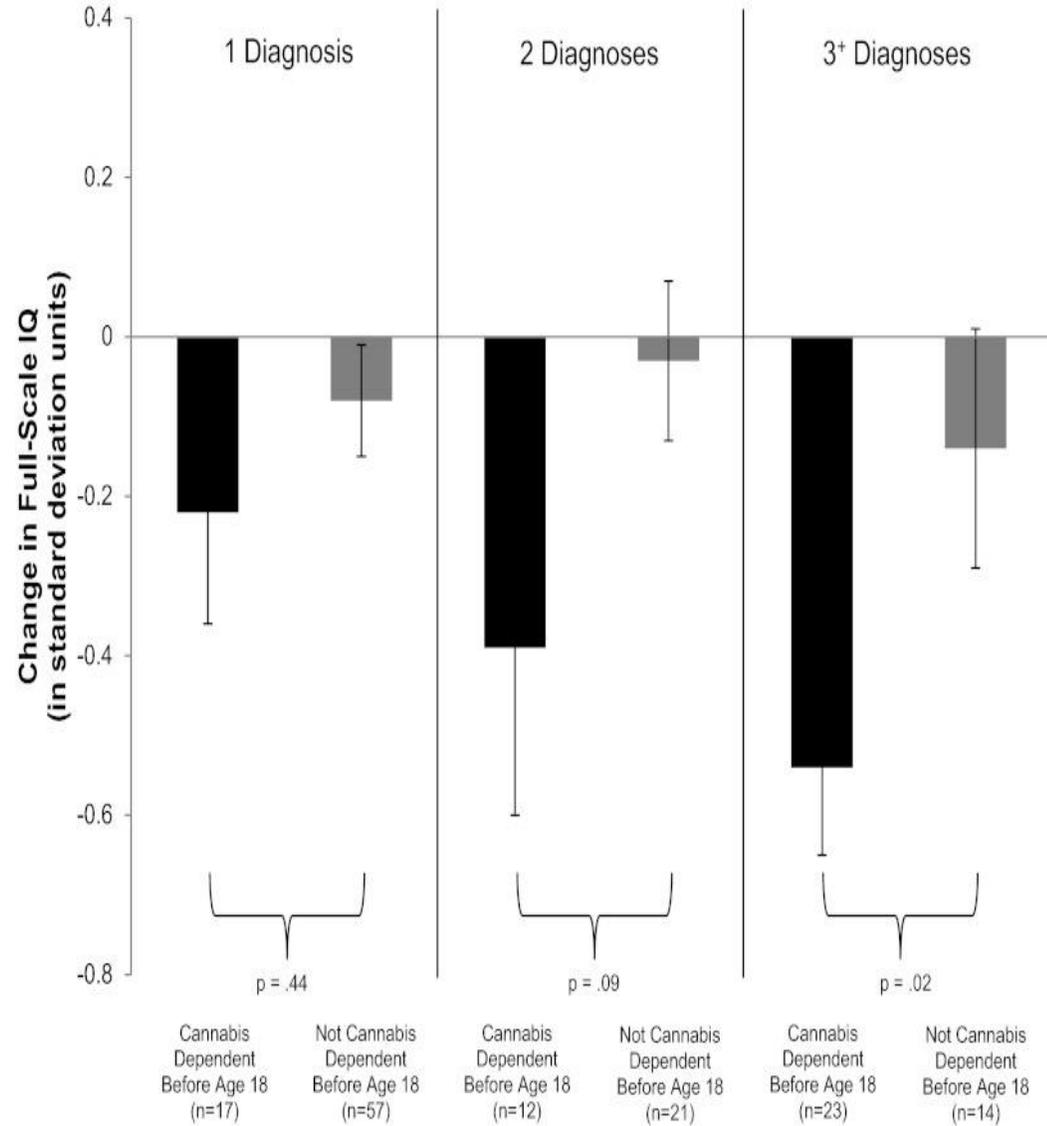
Author	Country	Exposed	Controls	Age at follow up (s.d.)	Cannabis effect 'd' (CI)
Fried et al. (2005)	Canada	38	59	17.86 (1.02)	-0.179 (-0.587 to 0.229)
Jackson et al. (2016)	USA (Minnesota)	308	1387	18.06 (0.63)	-0.136 (-0.234 to -0.038)
Jackson et al. (2016)	USA (RFAB)	118	193	17.89 (0.51)	-0.121 (-0.315 to 0.074)
Mokrysz et al. (2016)	UK	74	1709	15 (not reported)	-0.009 (-0.224 to 0.242)
Meier et al. (2018)	UK	132	1242	18 (not reported)	-0.15 (-0.330 to 0.029)
Meier et al. (2012)	New Zealand	52	242	38 (not reported)	-0.45 (-0.752 to -0.148)
Ross et al. (2020)	USA	86	476	17.25 (0.64)	-0.065 (-0.239-0.108)



Frequent/ Dependent cannabis use in adolescence was associated with on average a 2 point decline in IQ compared to not using cannabis

This may be driven by declines in verbal IQ

Fig. 1. Association between frequent/dependent cannabis use and IQ decline.

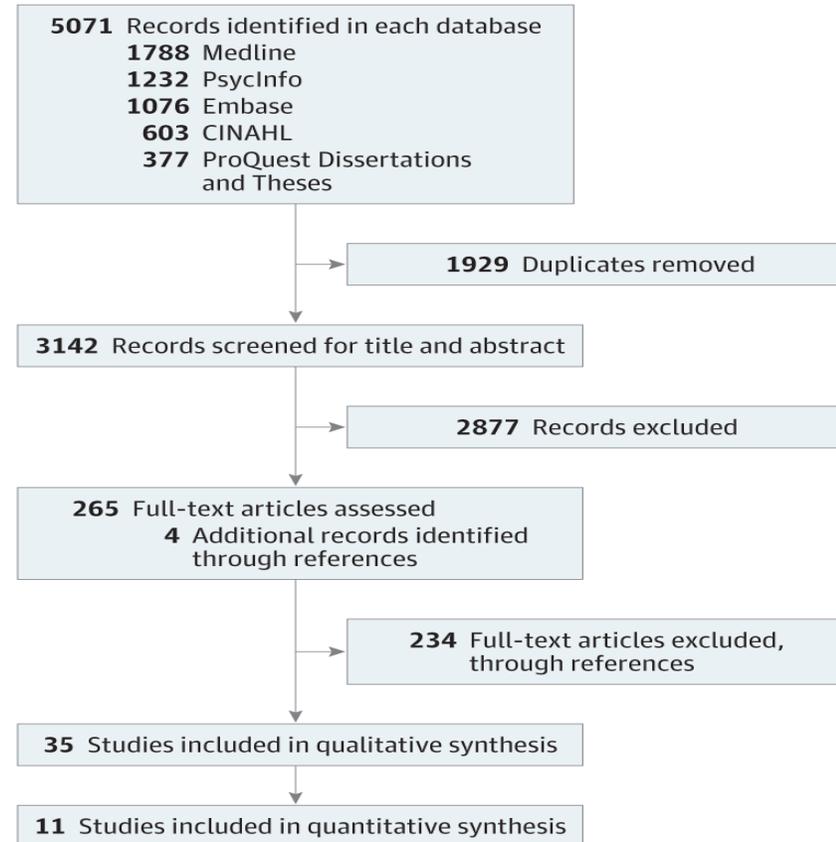


Persistent cannabis users show neuropsychological decline from childhood to midlife
Meier et al PNAS 2012

Cannabis: low mood and anxiety

From: **Association of Cannabis Use in Adolescence and Risk of Depression, Anxiety, and Suicidality in Young Adulthood: A Systematic Review and Meta-analysis**

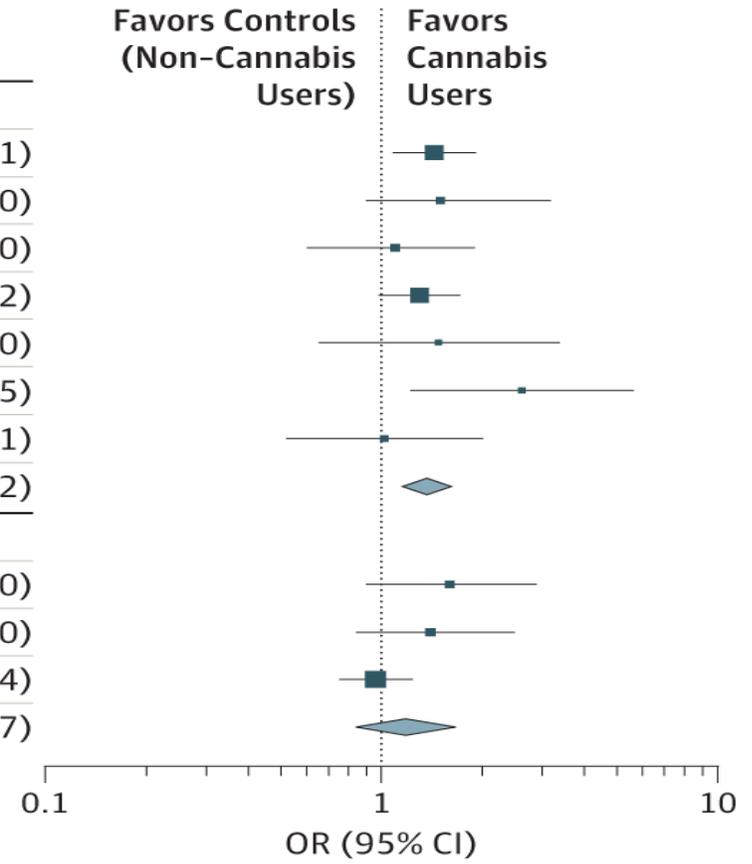
JAMA Psychiatry. 2019;76(4):426-434. doi:10.1001/jamapsychiatry.2018.4500



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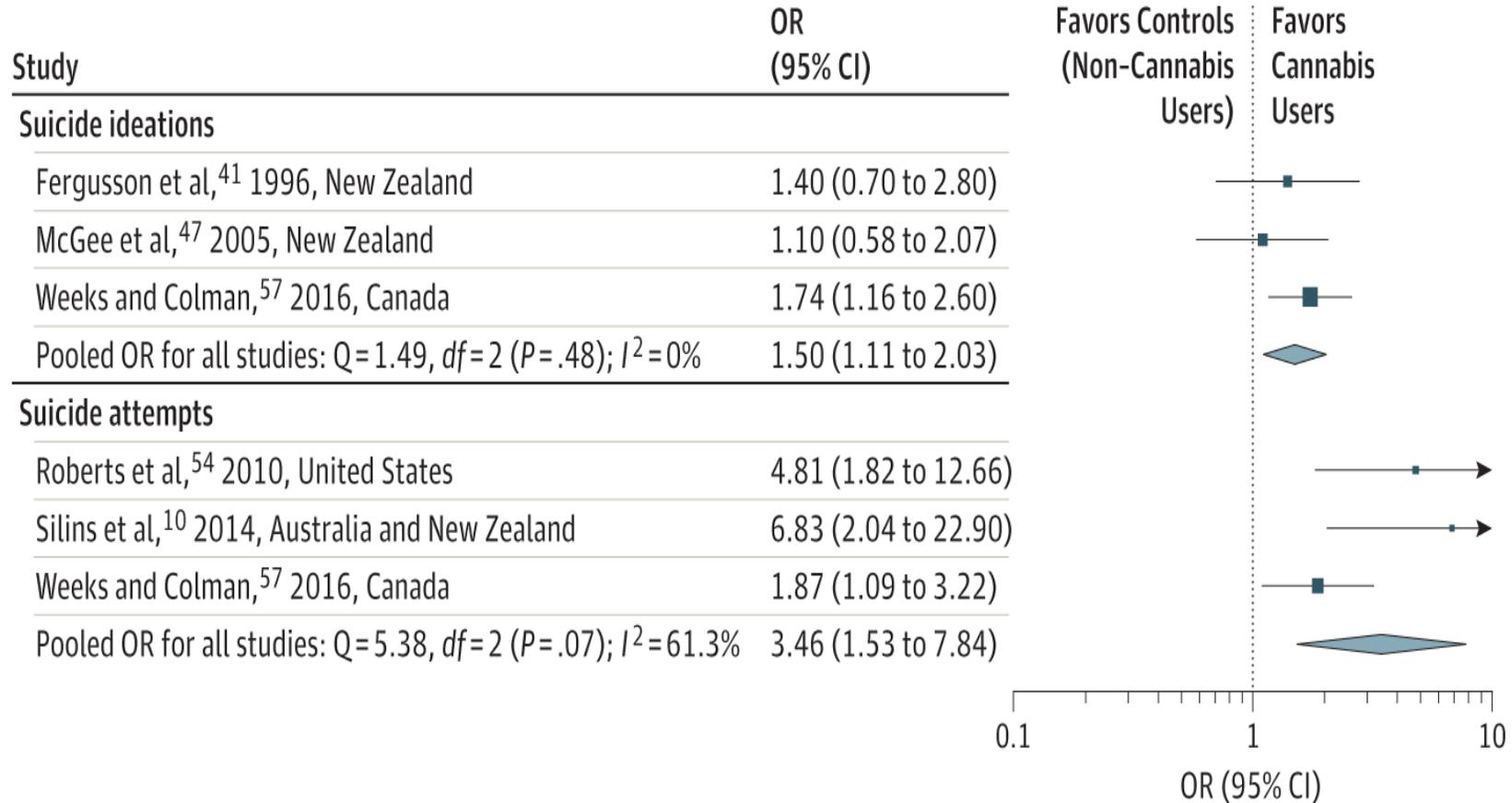
JAMA Psychiatry. 2019;76(4):426-434. doi:10.1001/jamapsychiatry.2018.4500

Study	OR (95% CI)
Depression in young adulthood	
Brook et al, ³⁴ 2002, United States	1.44 (1.08 to 1.91)
Brook et al, ¹⁶ 2011, United States and Puerto Rico	1.50 (0.90 to 3.20)
Degenhardt et al, ³⁸ 2013, Australia	1.10 (0.60 to 1.90)
Gage et al, ⁴⁴ 2015, United Kingdom	1.30 (0.98 to 1.72)
Georgiades and Boyle, ⁴⁵ 2007, Canada	1.48 (0.65 to 3.40)
Marmorstein and Iacono, ⁴⁶ 2011, USA	2.62 (1.22 to 5.65)
Silins et al, ¹⁰ 2014, Australia and New Zealand	1.02 (0.52 to 2.01)
Pooled OR for all studies: $Q = 3.26, df = 6 (P = .62); I^2 = 0\%$	1.37 (1.16 to 1.62)
Anxiety in young adulthood	
Brook et al, ¹⁶ 2011, United States and Puerto Rico	1.60 (0.90 to 2.90)
Degenhardt et al, ³⁸ 2013, Australia	1.40 (0.84 to 2.50)
Gage et al, ⁴⁴ 2015, United Kingdom	0.96 (0.75 to 1.24)
Pooled OR for all studies: $Q = 3.26, df = 2 (P = .20); I^2 = 42\%$	1.18 (0.84 to 1.67)



From: **Association of Cannabis Use in Adolescence and Risk of Depression, Anxiety, and Suicidality in Young Adulthood: A Systematic Review and Meta-analysis**

JAMA Psychiatry. 2019;76(4):426-434. doi:10.1001/jamapsychiatry.2018.4500



Association of Cannabis Use With Self-harm and Mortality Risk Among Youths With Mood Disorders

Cynthia A. Fontanella, PhD; Danielle L. Steelesmith, PhD; Guy Brock, PhD; Jeffrey A. Bridge, PhD; John V. Campo, MD; Mary A. Fristad, PhD

Table 3. Unadjusted and Marginal Structural Model–Adjusted HRs for Associations Between CUD and Nonfatal Self-harm, Suicides, and All Other Mortality Categories

Characteristic	No. of events	Follow-up, person-years	Rate per 100 000 person-years	Unadjusted HR (95% CI)	Adjusted HR (95% CI) Marginal structural model 1 ^a	Adjusted HR (95% CI) Marginal structural model 2 ^a
Nonfatal self-harm						
No CUD	1810	163 660	1118.3			
CUD	307	14 335	2141.6	2.13 (1.80-2.40)	3.67 (2.88-4.68)	3.28 (2.55-4.22)
Suicides						
No CUD	23	163 660	14.1			
CUD	7	14 640	47.8	3.46 (1.48-8.07)	2.23 (0.93-5.30)	1.22 (0.44-3.43)
All-cause deaths						
No CUD	215	163 660	131.4			
CUD	63	14 640	430.3	3.28 (2.47-4.34)	2.06 (1.53-2.78)	1.50 (1.13-2.24)
Unintentional overdose						
No CUD	53	163 660	32.4			
CUD	29	14 640	198.1	6.38 (4.05-10.04)	3.82 (2.38-6.13)	2.40 (1.30-4.16)
Motor vehicle deaths						
No CUD	16	163 660	9.8			
CUD	4	14 640	27.3	2.68 (0.90-8.03)	1.75 (0.56-5.46)	2.40 (0.70-7.86)
Homicides						
No CUD	14	163 660	8.6			
CUD	8	14 640	54.6	6.23 (2.61-14.87)	3.85 (1.52-9.74)	3.23 (1.22-8.59)

Abbreviations: CUD, cannabis use disorder; HR, hazard ratio.

^a Marginal structural model 1 includes demographic variables only (age, sex, race/ethnicity, Medicaid eligibility status, and residence).

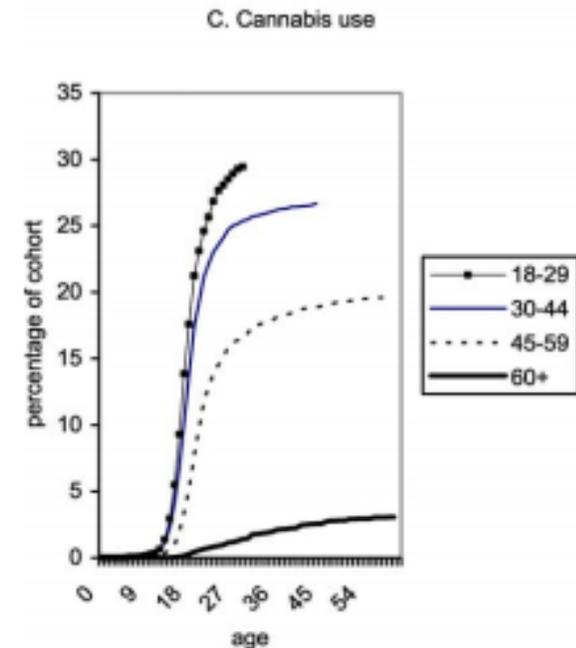
^a Marginal structural model 2 includes all variables in Table 1 except primary diagnosis.

Cannabis is a young person's drug

Median age of onset of use 18-19, half of young people who use cannabis start use as children.

Incidence of use growing in young people

Degenhardt, L., Chiu, W. T., Sampson, N., Kessler, R. C., Anthony, J. C., Angermeyer, M., ... & Karam, A. (2008). Toward a global view of alcohol, tobacco, cannabis, and cocaine use: findings from the WHO World Mental Health Surveys. PLoS medicine, 5(7), e141.



Warnings from US Surgeon General

NO AMOUNT OF CANNABIS IS SAFE
FOR THE DEVELOPING BRAIN

Jerome Adams (2019)



Stormzy...



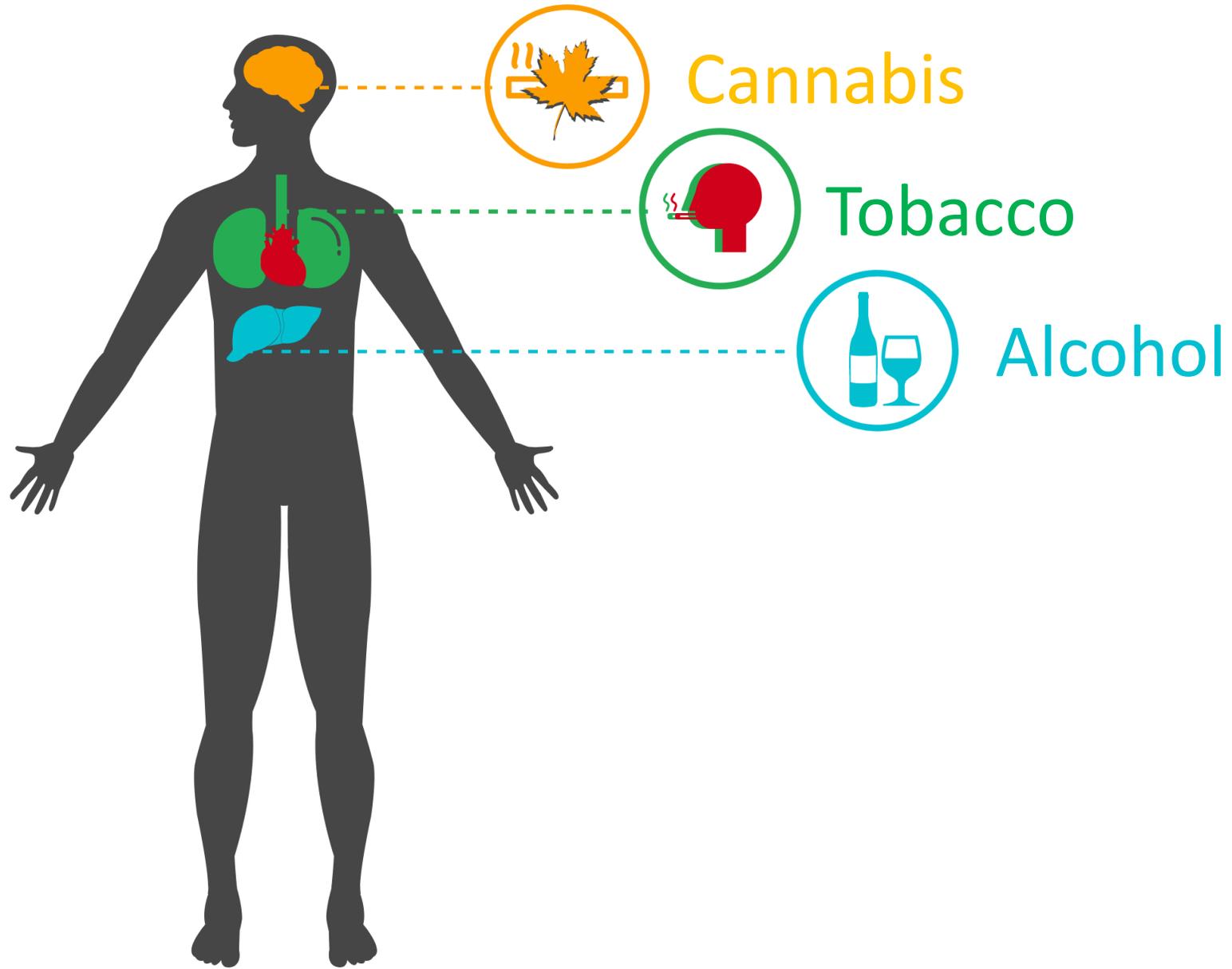
“If you’ve got mental health problems, stop smoking weed. It’s not good for your mental health.

“I have suffered with mental health problems for the past few years.

“When I used to feel depressed, I would lock myself away and smoke weed and I would just get worse and worse and worse.

“It does not help your situation. It will f**k you up. It feels good for, like, 20 minutes and then after that ... we all know, us weed smokers, we know how it goes.”

<https://www.capitalfm.com/artists/stormzy/mental-health-depression-quit-weed/>



USA and Canada have embarked on a major pharmaceutical experiment
on the brains of their youth, and we should wait and see the outcome of the
experiment”

British Journal of Psychiatry (2018)
195–196. doi: 10.1192/bjp.2018.1

Cannabis and psychosis: what do we
know and what should we do?

Colizzi and Robin Murray



Professor Sir Robin
Murray

Kings College London



We Need to Talk About Prevention

Colm Healy, B.Sc., M.Sc., Mary Cannon, M.D., Ph.D.

Since the turn of the century, the study of psychotic experiences in the general population has emerged as a major paradigm in mental health research. We now know that psychotic experiences are a relatively prevalent phenomenon, particularly in children and adolescents (1). They do not occur randomly and are clustered with other psychopathology (2–4), poor functioning (5, 6), and suicidal thoughts

parental mental disorders and who also reported psychotic experiences had a fourfold increased risk of mental disorders and a sixfold increased risk of psychopharmacology treatment. These findings demonstrate that reporting psychotic experiences in childhood has a synergistic effect on risks posed by either existing psychopathology or parental mental health history.

Thank you for listening

Any questions?