

Cannabis, Cocaine & Consultation

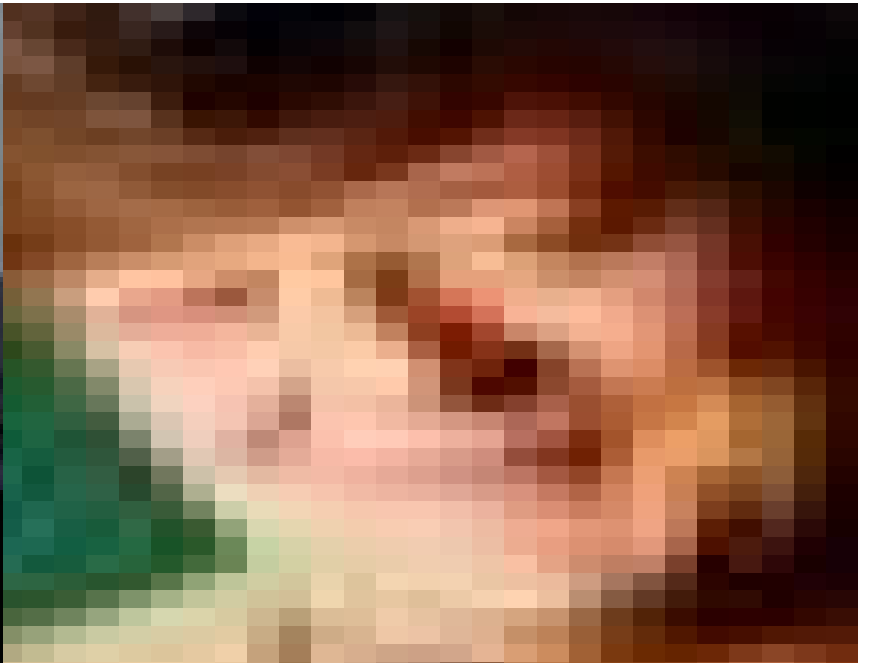
Yasir Abbasi

MBBS, PG Cert, PG Dip, MRCPsych, EDPM

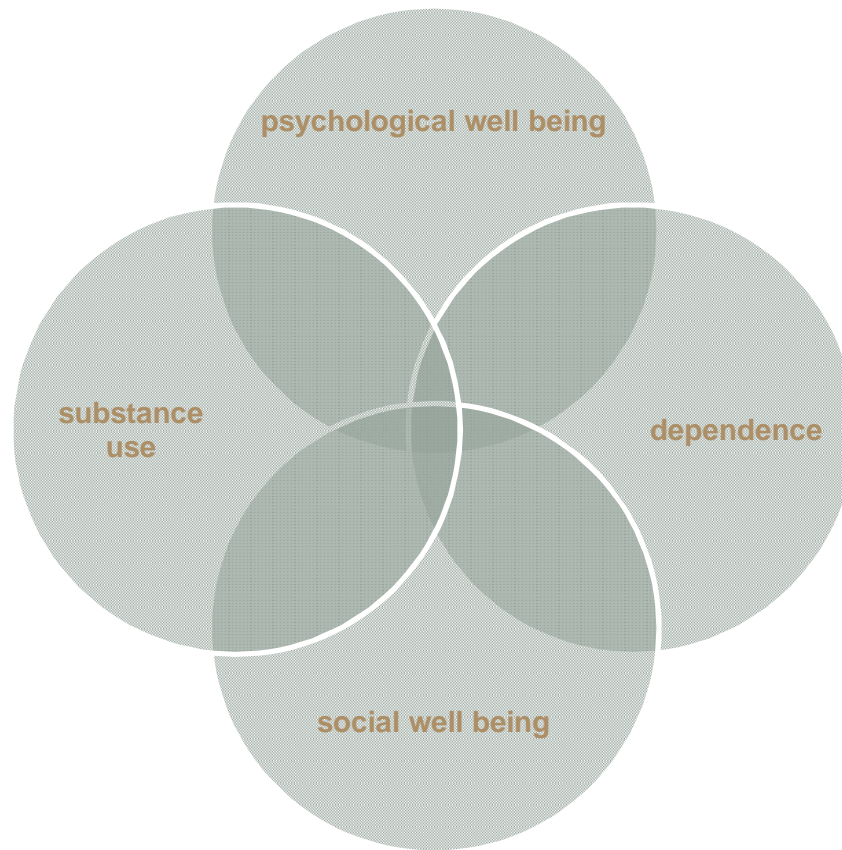
- ❖ Clinical Director for Addictions Services- Mersey Care NHS Trust
 - ❖ Honorary Senior Lecturer- University of Liverpool
- ❖ Regional Specialty Rep for Substance Misuse for Royal College of Psychiatrist
- ❖ Founding Trustee- Painkiller Addiction Information Network (PAIN)

Declaration of Interest

- In the past I have received honorarium and/ or other support from: Indivior, Martindale, Bite Medical and Mundipharma
- Honorarium from Family Doctor Association for this session

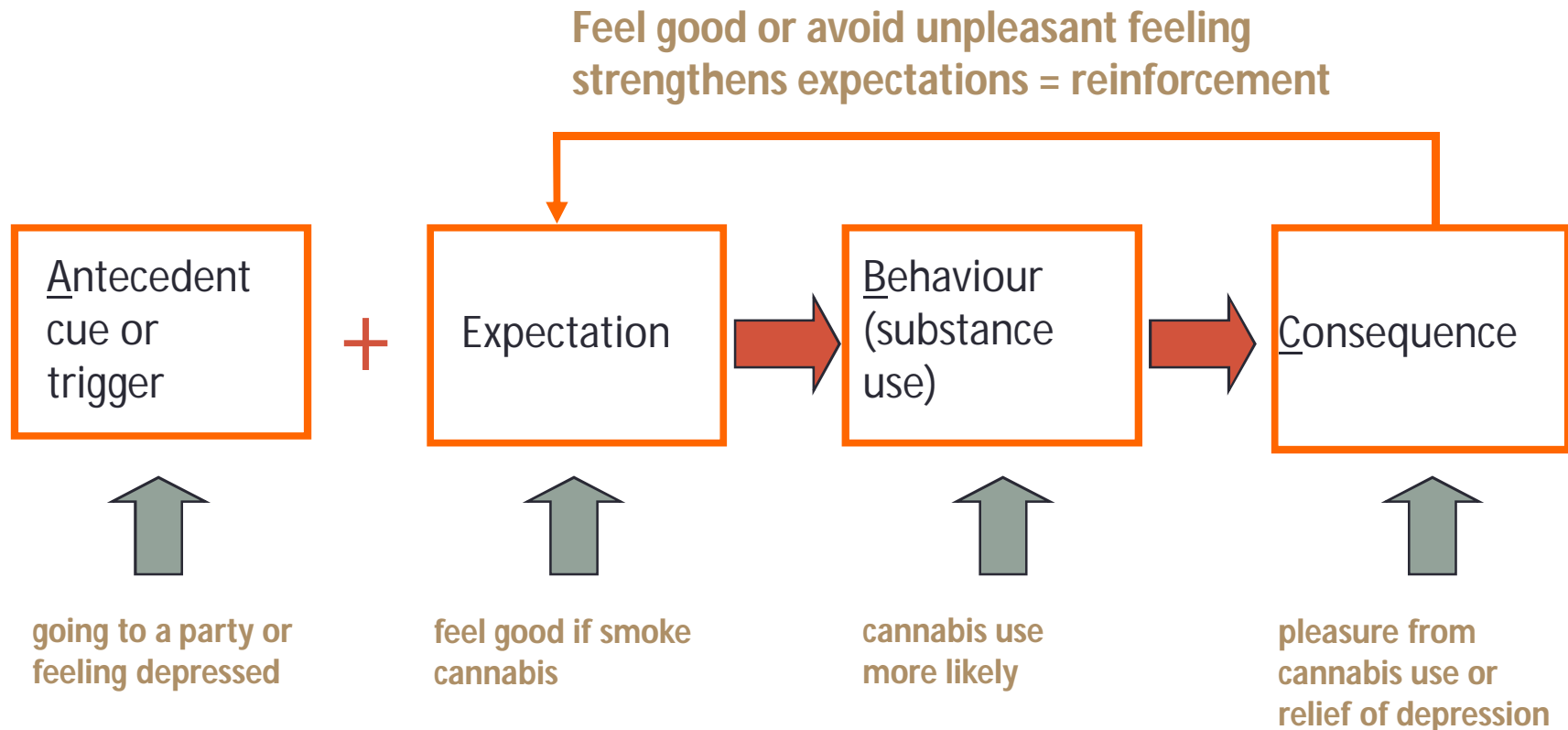


Domains (or components) of Addiction



The ABC Model of Behaviour

principle same for all drugs – example of cannabis use



Classification of Psychoactive Drugs

- o **Opiates:** euphoria, analgesia, drowsiness
 - o morphine like
 - o partial agonists
- o **Stimulants:** overactive, talkative, confident
 - o entactogens
 - o amphetamines and cocaine
- o **Depressants:** relaxation, disinhibition
 - o cannabinoids
 - o alcohol
 - o benzodiazepines
- o **Hallucinogens:** altered perception, mood change
 - o Solvents, GHB/GBL
 - o LSD and psilocybin

Constantly evolving scene.....

NEWS

Six in hospital after taking 'legal highs' at Parklife festival

By [Name]



A nation of prescription drug addicts: More Britons die from abusing painkillers and tranquillisers than heroin and cocaine

By [Name]



Clubs ditch ketamine for Elephant Tranquillisers

By [Name]



Neurotransmitters – summary of main effects

effects depend upon sites and subtypes

Transmitter	Effect
GABA	General inhibition of neuronal activity
Acetylcholine	Arousal and memory
Dopamine	Psychosis, pleasure response, voluntary movement, body temperature
5HT	Sleep, body temperature, mood
Noradrenalin	General stimulant – ‘fight and flight’
Neuropeptides	Pain, hormone release

Drugs & Mental Illness-Possible Mechanisms

- a primary psychiatric illness precipitating or leading to substance misuse
- substance misuse worsening or altering the course of a psychiatric illness
- intoxication mimicking or causing psychological symptoms
- dependence mimicking or causing psychological symptoms
- substance withdrawal syndromes leading to psychiatric symptoms or illnesses
- substance misuse and mental illness coexisting as two separate conditions by coincidence
- any combination of the above

Stimulants

- o Cocaine

- o Powder - C, coke, charlie
- o Crack – rock, stone

- o Amphetamine

- o Dexamphetamine – whizz, speed
- o Methylamphetamine - ice

- o Ecstasy- MDMA

- o Synthetics- Go Caine,
Charlie Sheen

- o Nicotine, caffeine



Stimulants

- **Effects**
 - Euphoria
 - Overactivity, talkativeness, energy, confidence
 - Empathy
 - Perceptual awareness, illusions (dance drugs)
- **Adverse consequences**
 - Hypertension
 - Dehydration (dance drugs)
 - Blood clotting
- **Withdrawal symptoms**
 - Dysphoria with insomnia and nightmares
 - Fatigue and prolonged sleep episodes

The Particular Case of Cannabis

Cannabis



herbal cannabis
(flowering tops and
leaves): <1-18% THC
cannabis resin: 1-17%
THC also available as an
oil: 60% THC

intensive indoor
growing can increase
THC yield x2-3

Cannabis and Cannabinoids

- only **tetrahydrocannabinol** (THC) produces psychoactive activity
- effective threshold dose of THC is 50mcg/kg and effects are dose related
- **Cannabidiol (CBD)** is important because of anxiolytic, anticonvulsant, and antipsychotic properties
- **anandamide** is an endogenous agonist at CB1 (brain) receptors, **arachidonoylglycerol** at CB2 (immune cell) receptors
- synthetic compounds:
 - HU-210** has x800 potency of THC
 - noladin** is a CB1 antagonist

Synthetic Cannabinoids- SPICE

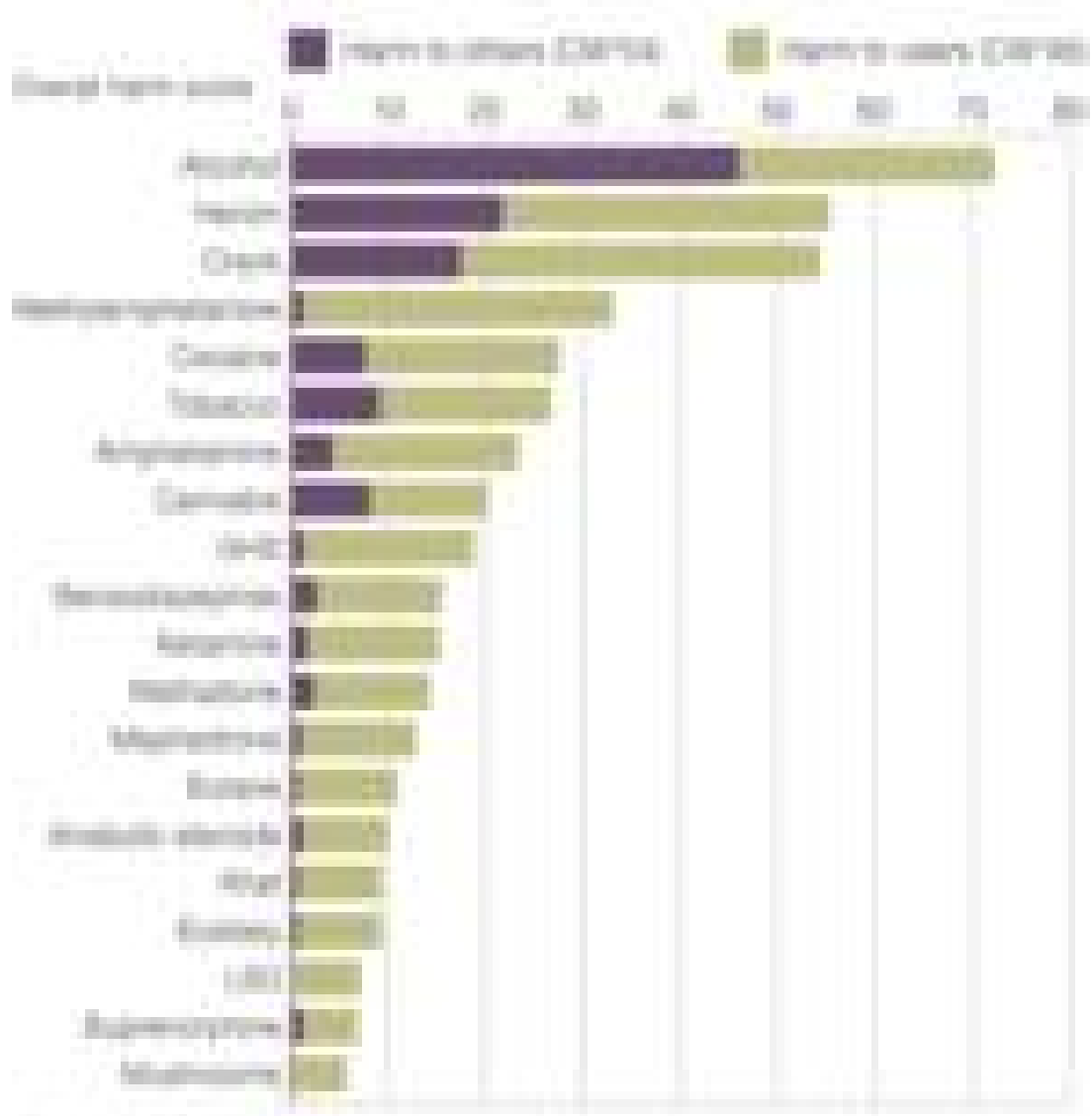
- “Spice” or K2 -various synthetic cannabinoid-containing products. THC-like mode of action (e.g. acting as CB1 receptors); , amount of added synthetic cannabinoids (CB) may vary considerably the possibility of accidental overdosing with a risk of severe psychiatric complications cannot be excluded.
- Anxiety, panic, excessive sedation, transient blindness, transient motor loss, hallucinations.
- Some experiencing acute embolic-appearing ischemic strokes, synthetic cannabinoid JWH-018

(Ischemic stroke after use of the synthetic marijuana “spice” Melissa J. Freeman, David Z. Rose, Martin A. Myers, Clifton L. Gooch, Andrea C. Bozeman, W. Scott Burgin Neurology Dec 2013, 81 (24) 2090-2093)

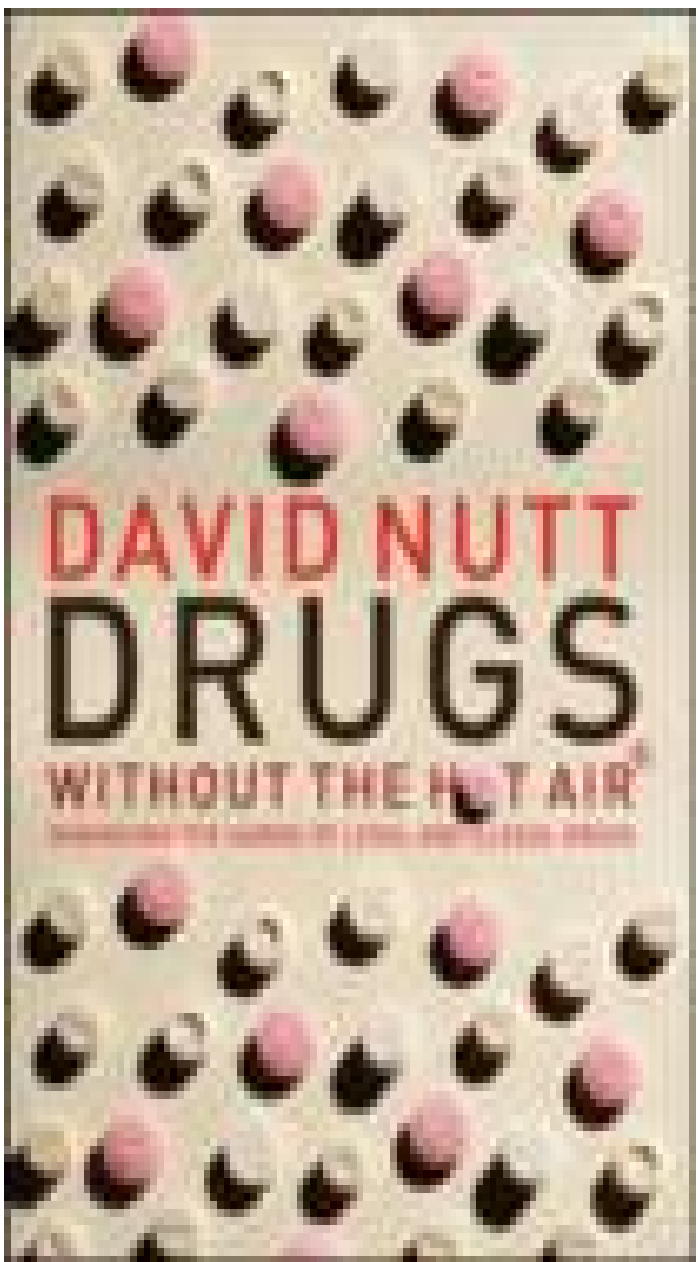
Legalising Cannabis??

- Pharmaceutical Grade Cannabis (? CBD, some THC)
- Recreational Use Cannabis- other countries

Most harmful drugs



Source: The Centre for Drug Policy Studies



CBD Products



CHILL

with us this February

CBD Foot massage

with

2x Classic Pedicures

2x

Cocktails



£95

COCO

CBD Oils

- CBD to counteract psychotic symptoms and cognitive impairment associated with cannabis use (A systematic review of the antipsychotic properties of cannabidiol in humans, Schizophrenia Research Volume 162, Issues 1–3, March 2015, Pages 153-161)
- CBD may lower the risk for developing psychosis by opposite effects in key regions, the striatum, hippocampus and prefrontal cortex.
- TIL-TC150 Rx- a cannabis plant extract produced by Tilray[®], containing 100 mg/mL CBD and 2 mg/mL THC- in children with Dravet syndrome resulted in a reduction in seizure counts, spike index on EEG, and improved quality of life measures (A prospective open-label trial of a CBD/THC cannabis oil in dravet syndrome. Annals of clinical and translational neurology, Volume5, Issue9 September 2018, Pages 1077-1088)

1845 Moreau administered to self and students in high dose: “there is not a single manifestation of mental illness that cannot be caused by hashish, from simple manic excitement to frenzied delirium.....the merest injury to the senses.....the most varied disorders of feelings.”

1843 O’Shaughnessy treated rheumatism, cholera, convulsions, tetanus with tincture of cannabis: “alleviation of pain.....aphrodisia.....mental cheerfulness.....antiemetic. The disposition developed was uniform in all.”

Cannabis

- **Effects**
 - Tingling in body and head – dizziness and light headedness, tachycardia
 - Intensification of mental associations
 - Relaxed, calm, disconnected from reality, incoherent conversation
 - Heightened perception and distortion of time
 - Drowsiness, muscle weakness
 - Increased appetite
- **Withdrawal**
 - Craving, irritable
 - Insomnia, strange dreams, loss of appetite

... mental illness?

...mechanisms of comorbidity?

Cannabis at least linked to.....

- depressive episodes (ICD code: F32)
- schizophrenia (ICD code: F20)
- toxic confusional states (ICD code: F12.03)
- drug induced psychosis (ICD code: F12.5)
- 'amotivational disorder' (ICD code: F12.8)

Schizophrenia and Cannabis

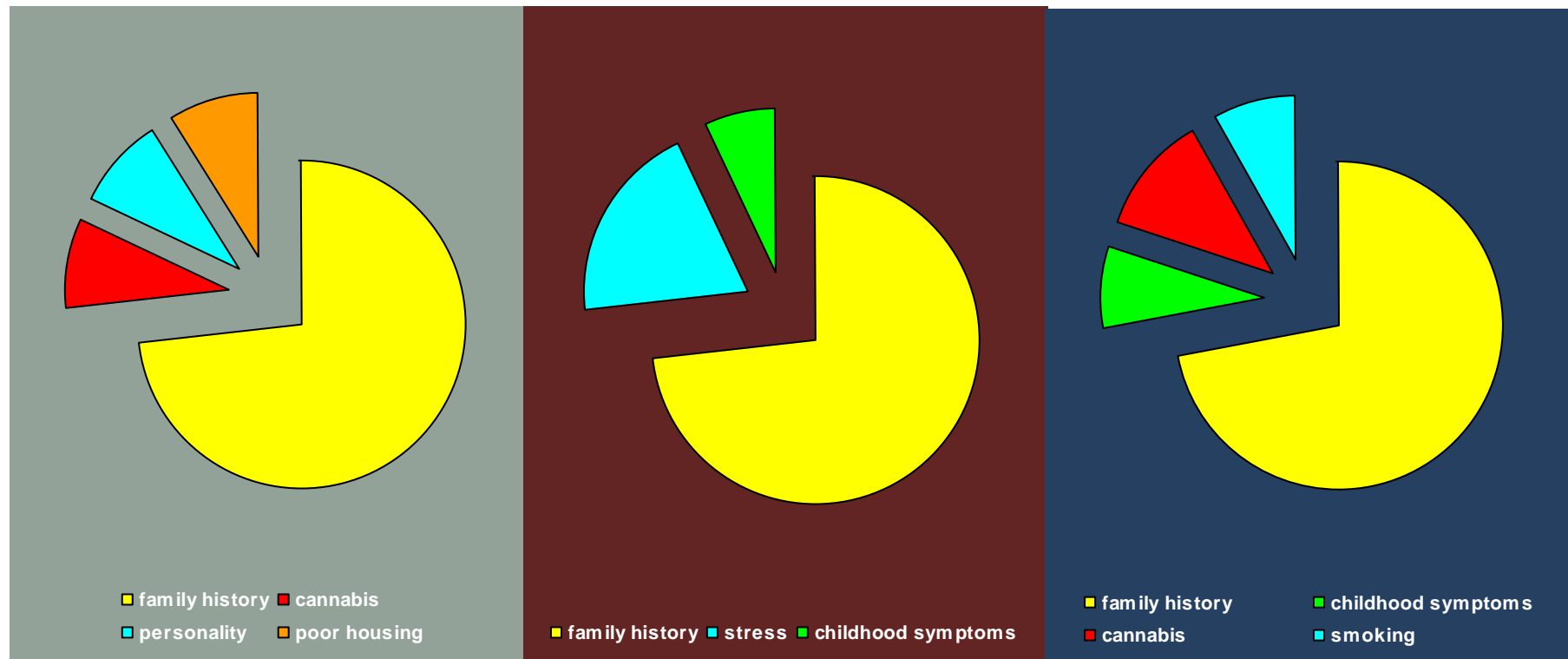
Swedish conscripts (approx 50,000) followed up for 15yrs. Odds ratio of diagnosis of schizophrenia x6 reduced to x3 when controlled for previous history, IQ, other drug use. (Andreasson et al. 1987, Zammit et al. 2002)

Dutch NEMESIS (approx 4100 population) followed up for 3yrs. Odds ratio of psychotic symptoms x3 rising to x6.8 for high dose users. Lifetime use most powerful predictor. (Van Os et al. 2002)

Dunedin birth cohort (approx 750 births) followed up for 27yrs. Odds ratio of psychotic symptoms x6.6 and x3.1 for schizophrenia diagnosis. Diagnosis most likely if early childhood symptoms of psychosis. (Arseneault et al. 2002)

Model for Multiple Causality

cannabis is neither necessary nor, usually, sufficient to cause schizophrenia



Conclusions: Cannabis and Psychosis

- cannabis use is associated with later psychotic symptomatology and schizophrenia diagnosis – intoxication may cause a toxic confusional state
- cannabis use antedates psychosis but interacts with early childhood signs and symptoms of psychosis to increase the risk of schizophrenia diagnosis
- cannabis effects persist after controlling for other drug use, social deprivation, age, sex, IQ, dose and adherence with antipsychotic medication
- cannabis is an independent risk factor for psychosis relapse with heavier users experiencing more relapses and more disorganisation
- cannabis can reduce negative symptoms, reduce affective symptoms, and reduce the side effects of antipsychotics

Use of antipsychotic in patients: dual diagnosis (alcohol +/- drugs + psychosis)

Study	N	Ita	Nb	Subst	Treatment	II	II	P	Comments
Brannon et al ²⁰⁰⁷	162	81	81	Alcohol + drugs	ATP vs TYP vs PLA	No	No	No	ATP ↓ substance use
Crabtree et al ²⁰⁰⁷	111	55	56	Alcohol + drugs	CLZ vs TYP	No	No	No	CLZ ↓ substance use ↓ relapse
Brannon et al ²⁰⁰⁸	88	44	44	Alcohol + drugs	CLZ vs ATP vs TYP	No	No	No	CLZ ↓ relapse
Perkins et al ²⁰⁰⁸	249	124	125	Alcohol + drugs	ATP vs TYP	No	No	No	No difference
Buller et al ²⁰⁰⁸	111	55	56	Alcohol + drugs	RIS (mg) vs PLA (mg)	No	No	No	RIS ↓ substance use
Crabtree et al ²⁰⁰⁹	41	20	21	Alcohol + cannabis	CLZ vs RIS	No	No	No	CLZ ↓ relapse
Brannon et al ²⁰⁰⁹	86	43	43	Alcohol	CLZ vs PLA vs TYP	No	No	No	CLZ ↓ relapse
Moore et al ²⁰⁰⁹	34	17	17	Alcohol	OLA vs TYP	No	No	No	Equal ↓ alcohol use
Brannon et al ²⁰¹⁰	192	96	96	Alcohol	QTP	No	No	No	No difference
Brannon et al ²⁰¹⁰	12	6	6	Substance + alcohol	QTP	No	No	No	QTP ↓ alcohol use

Drug use mainly cannabis along with alcohol

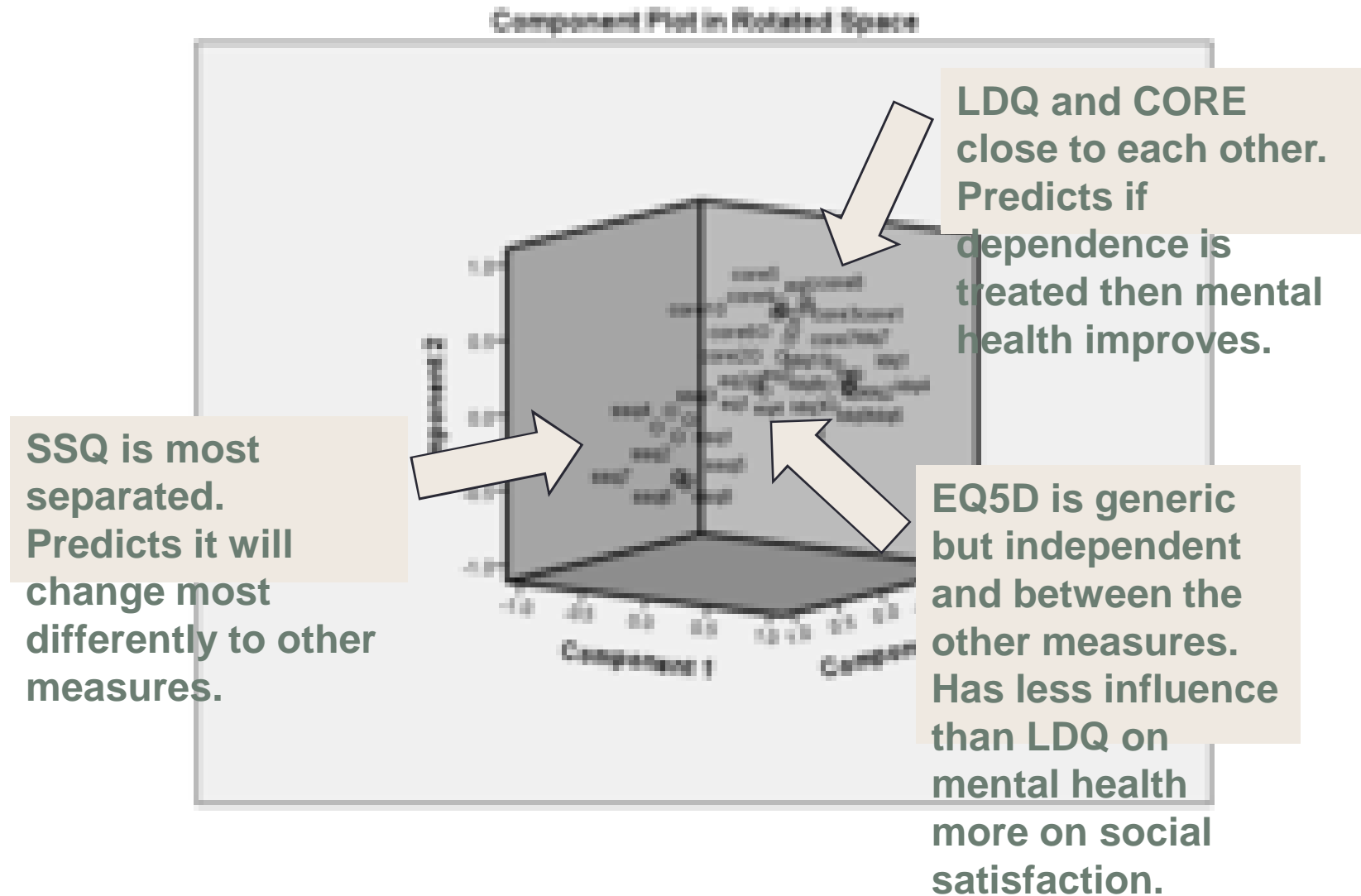
Clozapine seemed to be associated with better outcomes

Use of antipsychotics in stimulant related substance misuse

Study	N	N%	MI (N%)	Treatment	MI	MI	P	Comments
Kempner et al ²⁰⁰⁷	88	12	Stimulants	OLGA	Yes	Yes	Yes	OLGA 1 relapse
Ward et al ²⁰⁰⁷	63	8	Stimulants	OLGA	Yes	Yes	Yes	No difference
Marshall et al ²⁰⁰⁷	88	18	Stimulants	OLGA	Yes	Yes	Yes	No difference
Lewis et al ²⁰⁰⁷	68	24	Stimulants	RIS	Yes	Yes	Yes	No difference
Chakravarti et al ²⁰⁰⁸	121	12	Stimulants	RIS	Yes	Yes	Yes	MI RIS 2 use
Chakravarti et al ²⁰⁰⁸	90	24	Stimulants	RIS	Yes	Yes	Yes	No difference
Lucht et al ²⁰⁰⁸	11	12	Stimulants	RIS (high)	Yes	Yes	Yes	RIS 1 depressive symptoms
Tillett et al ²⁰⁰⁸	34	29	Stimulants	APE	Yes	Yes	Yes	APE 2 use
Chen et al ²⁰⁰⁸	34	6	Stimulants	FLU (high)	Yes	Yes	Yes	FLU 2 use

Not helpful in stimulant dependence

Relationship between EQ5D LDQ CORE SSQ



Prescribing pitfalls

- Usually co-morbid pain- avoid long term opioid or gabapentinoid painkiller prescription- if you need to prescribe review regularly to assess necessity for prescription
- Long term benzodiazepines have no role as such.
- Need to build recovery capital- attend mutual aid groups like NA, or go to day recovery places such as SHARP, The Brink or Addaction
- Pharmacotherapy should only be considered once the goals are clear and there is sustained efforts to achieve abstinence
- Address underlying mental health issue- MCFT, Talk Liverpool

A good referral

- Type of substance
- Amount of substance
- Duration of current use
- Previous abstinence – Mental health
- GP summary- ?UDS
- For cannabis or stimulant no specific blood tests necessary but recent FBC and LFTs will help to see co-morbid alcohol use

Principles of Effective Consultation

Engagement & Motivation for Change



The curious case of cannabis, Crack & Consultation

- 27 year old male, presented to GP with anxiety and palpitations. He has been using cannabis daily for the past 7 years and has started weekly smoking crack for 1 year ago. He works as a gardener and lives with his partner and 5 year old daughter. No previous MH problems, no current medications or co-morbidity. Partner and parents don't use drugs.
- Do you think the illicit drugs may be one of the reasons for your symptoms?

Depending on individual needs may include:

- Motivational strategies
- Family and network support
- Cognitive-behavioural approach
- Self-help groups
- Carers support
- Increased structure / meaningful activity

Some common strategies

(Banerjee et al., 2002)

- Avoid rushing in with all but most essential assessment tools before relationship built
- Avoid lengthy tick box assessments at first meeting and use conversation as a means of eliciting introductory information
- Speak to colleagues who have previously managed to engage the person
- Engage the wider network of people, including services, relatives and friends

Motivation for change

- Motivation and ambivalence
- Motivational hooks- therapeutic alliance
- A style of consultation (OARS) - Open ended Questions, Affirmation, Reflective Listening and Summary
- A sense of direction – ‘Change Talk’
- Decisional Balance- literally a balance
- Address SU and Mental Health together

Resistance to change

- This is predictive of poor outcomes and lack of involvement.
- Resistance is a signal that the patient views the situation differently.
- Try to avoid evoking an argument and divert and deflect the energy the client is investing in resistance towards positive change
- Roll with resistance (Miller & Rollnick, 1991) with Reflective Questions

Simple Reflection

- Patient: "I don't plan to quit cannabis anytime soon!"
- Respond to resistance with non-resistance by repeating the client statement in a neutral form
- Clinician: "You don't think that abstinence would work for you right now?"

Amplified Reflection

- Patient: "I don't know why my partner is worried about this. I don't smoke any more than any of my friends"
- Reflect the client statement in an exaggerated form (but without sarcasm!)
- Clinician: "So your partner is worrying needlessly?"

Double- Sided Reflection

- Patient: "I know you want me to give up weed completely, but I am not going to do that!"
- Acknowledge what the patient has said but highlight their own contradiction
- Clinician: "You can see that there are some problems here like palpitations, but you are not ready to think quitting altogether?"

Shifting Focus

- Patient: "I can't stop smoking reefers when all my friends are doing it"
- Diffuse resistance by helping patient shift focus from obstacles & barriers
- Clinician: "You are way ahead of me. We are still exploring your concerns about whether you can continue your work. We are not ready to decide how cannabis fits in to your goal?"

Reframing

- Patient: “My partner is always nagging me about my weed. It really bugs me”
- Reframing acknowledges the validity of the client’s raw observation but offers a new meaning for them
- Clinician: “It sounds like your partner cares about you and is concerned, although they express it in a way that makes you angry?”

Goals of treatment

- Gradual reduction at a speed which suits the person- it is slow and arduous process.
- Getting and staying “clean” and sober
- Taking, and adhering to medication, if any
- Engagement in a community drug services and mental health recovery services, if required

Adverse Childhood Experiences (ACE)

- Adverse Childhood Experiences (ACEs) are traumatic events that affect children while growing up, such as suffering child maltreatment or living in a household affected by domestic violence, substance misuse or mental illness.
- <https://youtu.be/XHgLYI9KZ-A>

Summary

- It can effect ANYONE
- We should not try and change everything in one session
- Use the first few session to have collaborative goal setting, use OARS and reflective questioning
- Years of adverse experience cannot change overnight
- There is not much evidence around antidepressant or antipsychotics reducing drug use on their own
- Avoid opioid or benzodiazepine prescription for more than a week or two.
- Any underlying mental health issue should be addressed but drug use needs to reduce or stop to fully assess.

THANK YOU

ANY QUESTIONS

Email: yasir.abbasi@merseycare.nhs.uk

Twitter: @dryiabbasi

Website: www.merseycare.nhs.uk

Pain charity: www.painkillerfree.co.uk