Professor Tony Dowell

Professor of Primary Health Care and General Practice

University of Otago

Wellington

Saturday, June 10, 2017

(Room 12)

8:30 - 9:25 WS #90: Hot Topics in Mental Health

9:35 - 10:30 WS #102: Hot Topics in Mental Health (Repeated)

Hot topics in mental health

Tony Dowell
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University of Otago - Wellington - New Zealand

Today

- Mind Bending Drugs: how risky are they.
  - - the risk/ benefit evidence around recreational cannabis use
  - - Amphetamine use – primary and secondary exposure
- Medication use in the management of anxiety and depression – beyond the basics.
- Brief brief psychological interventions tailored to the GP consultation.
- Behavioural assessments in childhood. From antenatal onwards.

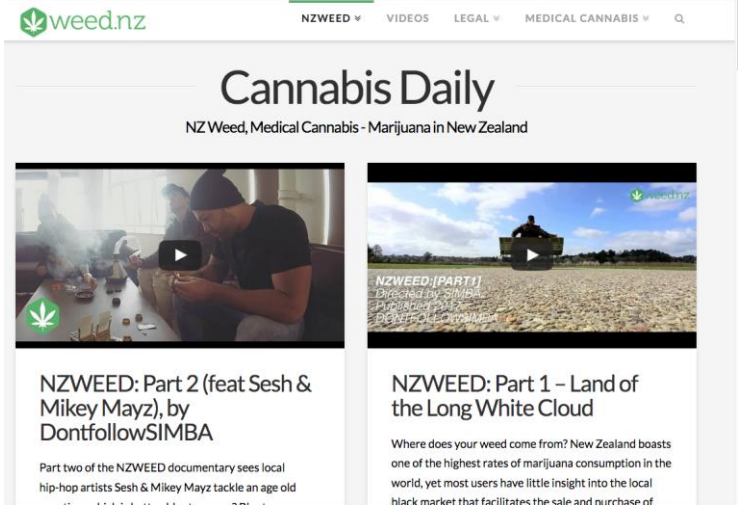
Cannabis and beyond

Stewart is 17 and his father recently found cannabis remains (A used blunt and a Tinny) in the garden following a party. Stewart's parents are worried, and at a routine visit for cholesterol review, Stewart's Dad asks you what your view is on the health risks for Stewart.

- Specifically – doesn't it make people psychotic?
- Won't it lead on to things like 'P".
- Stewart has **told** his dad "not to be biased, its not anything like as dangerous as alcohol, and to chill"

Cannabis

- New Zealand
  - NZ / AUS highest OECD rates
  - 3rd most widely used recreational drug
  - 13.4% aged beween 16 – 64 (9th in world)
  - 15% > 10 times / month



Health Benefits

- Some use in specific conditions such as the spasticity associated with multiple sclerosis and some sorts of nerve root pain.
- For the treatment of chronic pain in adults
- As antiemetics in the treatment of chemotherapy-induced nausea and vomiting
- For improving patient-reported multiple sclerosis spasticity symptoms

Sativex can be prescribed in New Zealand but requires specialist endorsement and a specific application process.

Health impact

- NO increase overall mortality
- No conclusive evidence for cancer risk
- No worsening of immune cell response
- Ineffective at helping anything else (cancer, dementia, epilepsy, anxiety)

National Academies of Sciences, Engineering, and Medicine. The health effects of cannabis and cannabinoids: the current state of evidence and recommendations for research. National Academies Press; 2017 May 1.

Health impact

- Slight statistical association – Acute MI
- Worse respiratory illness
- Substantial evidence => Motor vehicle crash.
- Maternal smoking => Lower birth weight
- Limited evidence => poor childhood outcomes – memory , achievement
- Increased unemployment
- But Dunedin cohort study
  - Persistent cannabis use => neuropsychological decline across domains of functioning, even after controlling for years of education.
  - Stopping doesnt help

Health impact

- Development of schizophrenia or other psychoses, with the highest risk among the most frequent users. (OR 3.9 for heavy use)
- Increased likelihood of biploar disorder
- Increased likelihood of anxiety disorders
- Increased severity of PTSD symptoms.
- Increased suicide attempt (7x)
- Increased other drug use (8x)

Social impact of Cannabis use

- Daily users of cannabis < 17 years less likely to complete high school or obtain a degree.
- Overall social costs in $Million

Drug group	Family and friends	Acquisitive crime	Organised crime	Reduced tax base	Total	Health
Amphetamine-type stimulants	20.4	32.6	8.6	29.8	91.4	3.6
Cannabinoids	380.9	63.9	61.5	214.1	720.3	68.2
Hallucinogenic and psychedelic drugs	6.6	1.9	0.2	0.70	9.0	1.2
Opioid and sedative drugs	29.6	41.4	0.2	0.78	72.0	5.3
Total	**437.5**	**139.7**	**70.4**	**245.4**	**892.7**	**78.3**

Cannabis

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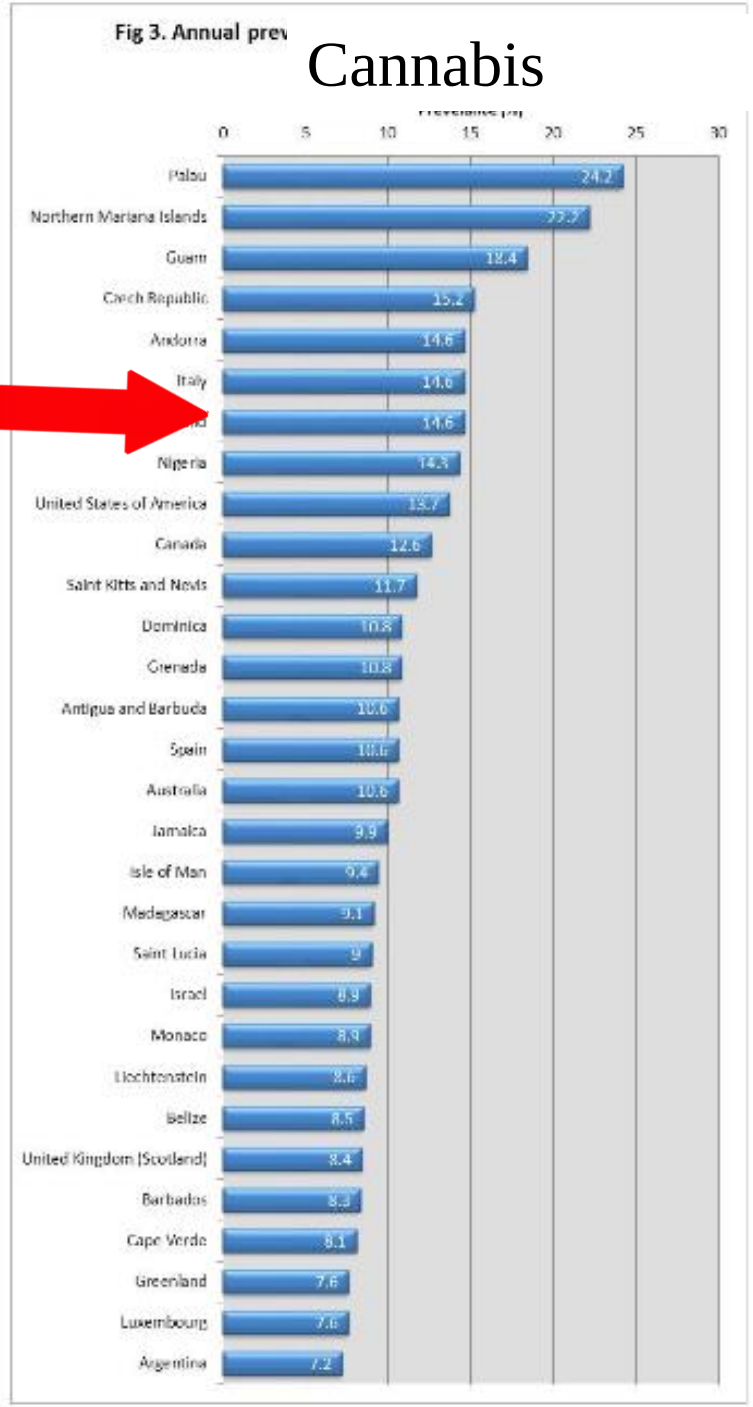
Fig 3. Annual prev
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Saint Kitts and Nevis
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Antigua and Barbuda
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Monaco
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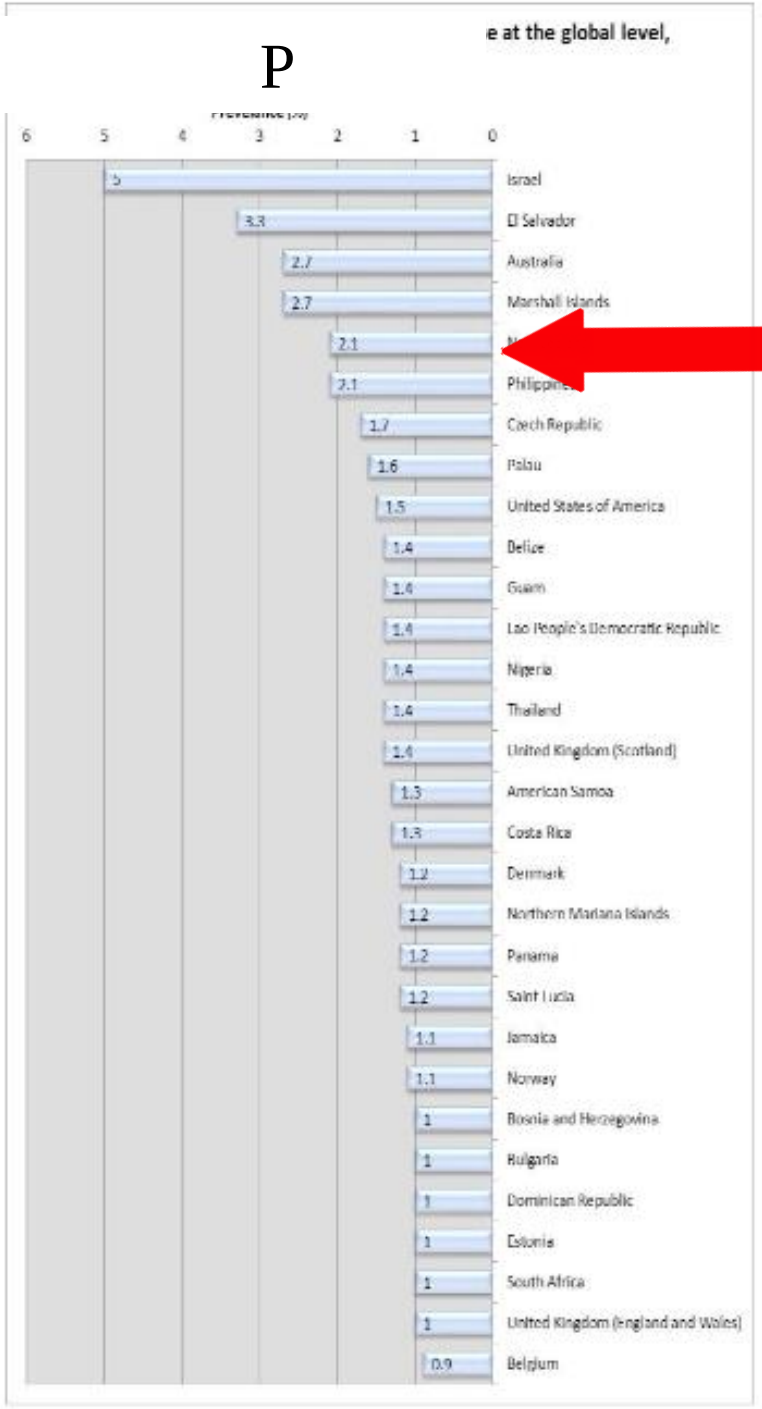
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Saint Lucia
1.1
Jamaica
1.1
Norway
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Bosnia and Herzegovina
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Bulgaria
1
Dominican Republic
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Estonia
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South Africa
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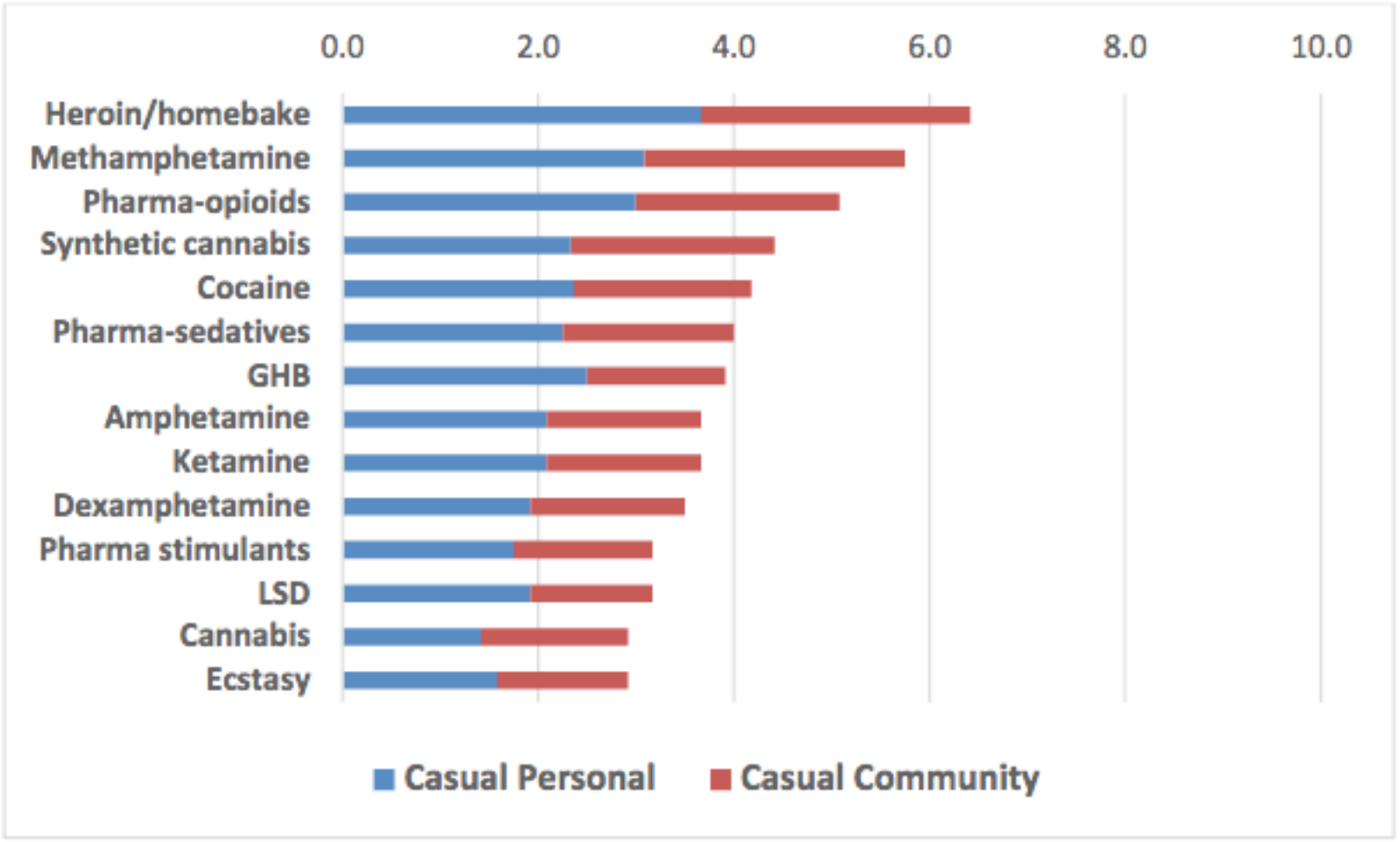
United Kingdom (England and Wales)
0.9
Belgium

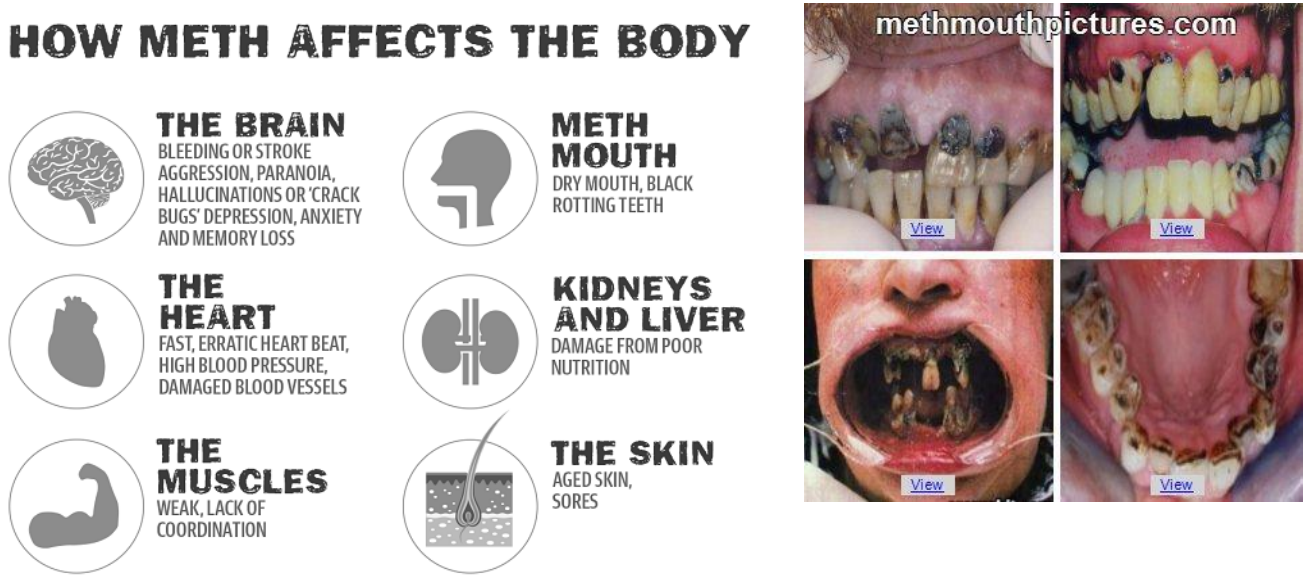
The League table

Figure 3. Expert rankings of personal and community harms for casual users



PRIMARY AMPHETAMINE USE

- Just don’t



Secondary Exposure - Domestic dwelling Meth contamination

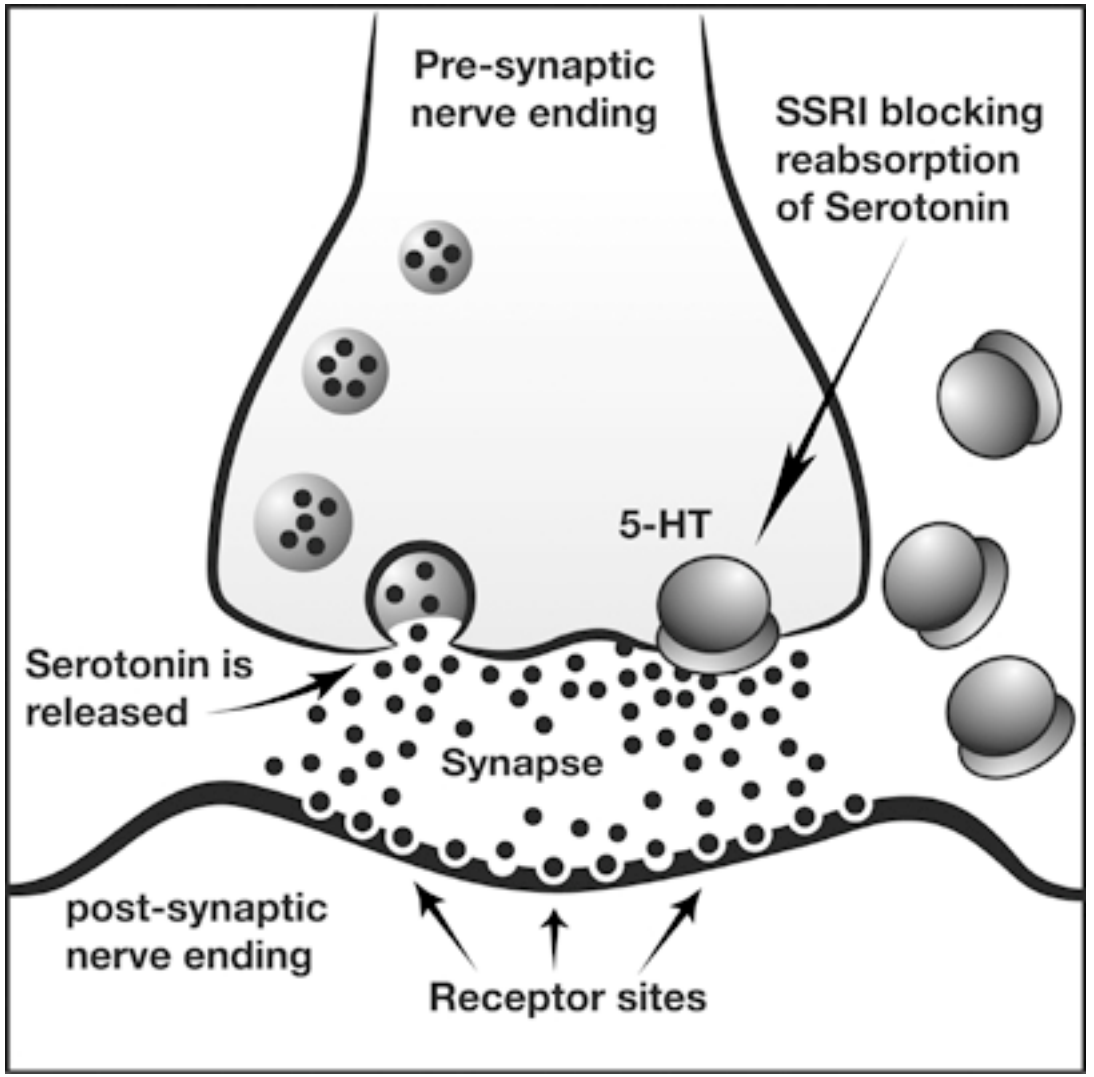
- Chemicals explosive toxic flammable
- Carpet residue increase chronic exposure for babies / toddlers who spend more time in contact with the floor.
- Meth Lab significant health risk
- In house with previous smoking – little toxicity

Medication and Anxiety and Depression

Nataly is 34 and has been on antidepressants for 10 years. Her previous doctor started them because she was having ‘panic attacks’ and depression over a bad relationship. She says that her current dose of 20 mg Fluoxetine isn’t working any more, she is becoming more depressed, she doesn’t like talking about problems and she is thinking of having a baby with her new boyfriend.

SSRI


Prozac
MOOD BRIGHTENER
Wash Your Blues Away!


Pre-synaptic nerve ending
SSRI blocking reabsorption of Serotonin
5-HT
Serotonin is released
Synapse
post-synaptic nerve ending
Receptor sites

Drug or talking therapy

- 11 randomized controlled trials compared a second generation antidepressant and CBT
- No statistically significant difference in effectiveness for response (risk ratio 0.91, 0.77 to 1.07), remission (0.98, 0.73 to 1.32), or change in 17 item Hamilton Rating Scale for Depression score (weighted mean difference, −0.38, −2.87 to 2.10)

Amick HR, Gartlehner G, Gaynes BN, Forneris C, Asher GN, Morgan LC, Coker-Schwimmer E, Boland E, Lux LJ, Gaylord S, Bann C. Comparative benefits and harms of second generation antidepressants and cognitive behavioral therapies in initial treatment of major depressive disorder: systematic review and meta-analysis. BMJ. 2015 Dec 8;351:h6019.

What's out there

- **SSRI**
  - Fluoxetine, Citalopram, Sertraline, Paroxetine
- **SNRI** (serotonin-noradrenaline reuptake inhibitor)
  - Venlafaxine, Duloxetine, Reboxetine
- **NaSSa** (noradrenergic and specific serotonergic antidepressant agents)
  - Mirtazepine

Variations in SSRI prescribing

- Mean DHB DDD / 1000 people = 45.7
- Canterbury = 71
- Lakes = 47.9
- Counties Manakau = 29.9

SSRI

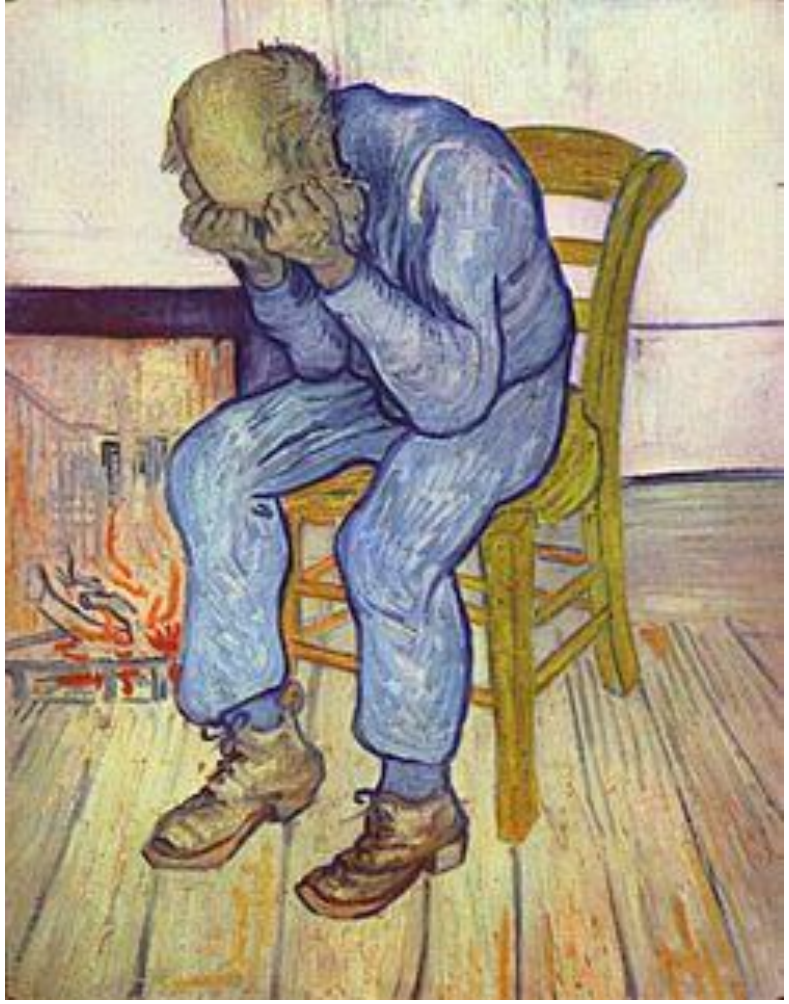
- Overall efficacy low in mild disorder
- Controversy over effect size

(15% - 37%)

Turner EH, Matthews AM, Linardatos E, Tell RA, Rosenthal R (January 2008). "Selective publication of antidepressant trials and its influence on apparent efficacy". *The New England Journal of Medicine* **358** (3): 252–60. doi:10.1056/NEJMsa065779

- Mild to moderate – effect in

2-4 /52



How well can **antidepressants** relieve symptoms?

Studies of people with moderate or severe depression showed:

Without antidepressant

= About **20 to 40** out of 100 people who took a placebo noticed an improvement of their symptoms within six to eight weeks

With antidepressant

= About **40 to 60** out of 100 people who took an antidepressant noticed an improvement of their symptoms within six to eight weeks

That means: **Antidepressants improved symptoms in about 20 out of 100 people.**

Switching SSRI

Short acting

- Citalopram
- Escitalopram
- Paroxetine
- Sertraline
  - Stop SSRI 1 Start SSRI 2 the next day
  - Can start Fluoxetine the next day

Switching SSRI

Fluoxetine – longer half life

- To short acting SSRI – wait 4/7. Start low dose (e.g Citalopram 10mg, venlafaxine 37.5 mg)
- Mirtazepine , Bupropion – 4-7 / 7
- Moclobemide – wait 5 weeks
- TCA – Wait 4-7/7 start v low dose TCA

Switching SSRI – Why

Patient request – adverse effects

- Drowsiness, fatigue / anxiety, headache , nausea
- Discontinue or switch
  - 43 % in first 3/12
  - 27% in next 3/12.

Dr perceived reasons

E.G Risk of Prolonged QT (Citalopram)

SSRI augmentation

- No certainty of any advantage between different monotherapies for either response to treatment or remission.

Augmentation

- Lithium
- Thyroxine ?
- Ritalin ?
- Antipsychotics

Best evidence	Lithium, T3
Some evidence	Atypical antipsychotic medication
Little evidence	Stimulants, inositol, estrogen, omega-3 fatty acids, DA agonists
No evidence	Herbal supplements, lamotrigine
Not effective	T4, pindolol

Coming off SSRI's

Yes –we can

•Research : Taking Fluoxetine to prevent recurrence 15/12, Continuation or placebo

- 23.3% depression recurrences in the taper arm and 10.5% in the continuation arm (Absolute difference 12.8% 96% CI 3.4%-22.3 % p=0.005).
- For every 17 patients taking maintenance antidepressant medication 1 was unable to discontinue successfully
- At 18 months 47% of the taper group and 4% of the continuation group were no longer taking antidepressants (absolute difference 43% (96% CI 33%-53%).

Mangin D; Dowson C; Mulder M; Wells E; Toop L; Dowell A; Arroll B . NAPCRAG 2015

SSRI in Pregnancy - ? Childhood Autism

- Possible
  - Serotonin (5HT) key role during developmentally sensitive periods, shaping early brain function
  - Early manipulation of 5HT secondary to SSRI may contribute to autism risk
  - OR - Maternal depression HPA axis
  - Also genetic link with maternal depression autism

- Evidence JAMA papers
  - 1st trimester 1580629 offspring => increased pre-term no neurodevelopmental (Sweden)
  - Canada 36,000 – no link.
- Association between antenatal exposure and ASD not causal

Brown HK, etal The association between antenatal exposure to selective serotonin reuptake inhibitors and autism: a systematic review and meta-analysis. *J Clin Psychiatry*. 2017;78(1):e48-e58.

One better than another ?

Selective serotonin reuptake inhibitors (SSRIs)

- Fluoxetine citalopram paroxetine sertraline

Serotonin-noradrenaline reuptake inhibitors (SNRIs)

•Not clear that SNRIs are more effective in treating depression

- duloxetine venlafaxine

Noradrenaline and specific serotonergic antidepressants (NASSAs)

•NASSAs unable to take SSRIs.

•Side effects similar SSRIs, fewer sexual problems. more drowsiness at first.

- mirtazapine

Drug treatment in adolescence

- If in doubt – don't.
- Always discuss with psychiatric team
- Reanalysis of original RCTs
  - Paroxetine doesn't work and is more harmful than thought

Le Noury et alRestoring Study 329: efficacy and harms of paroxetine and imipramine in treatment of major depression in adolescence. bmj. 2015

Pharmacotherapy does have a place

Dubicka B, Brent D. Editorial: Pharmacotherapy and adolescent depression–an important treatment option. Child and Adolescent Mental Health. 2017 May 1;22(2):59-60.

- Only fluoxetine was statistically significantly more effective than

Cipriani A, et alComparative efficacy and tolerability of antidepressants for major depressive disorder in children and adolescents: a network meta-analysis. The Lancet. 2016 Sep 2;388(10047):881-90.

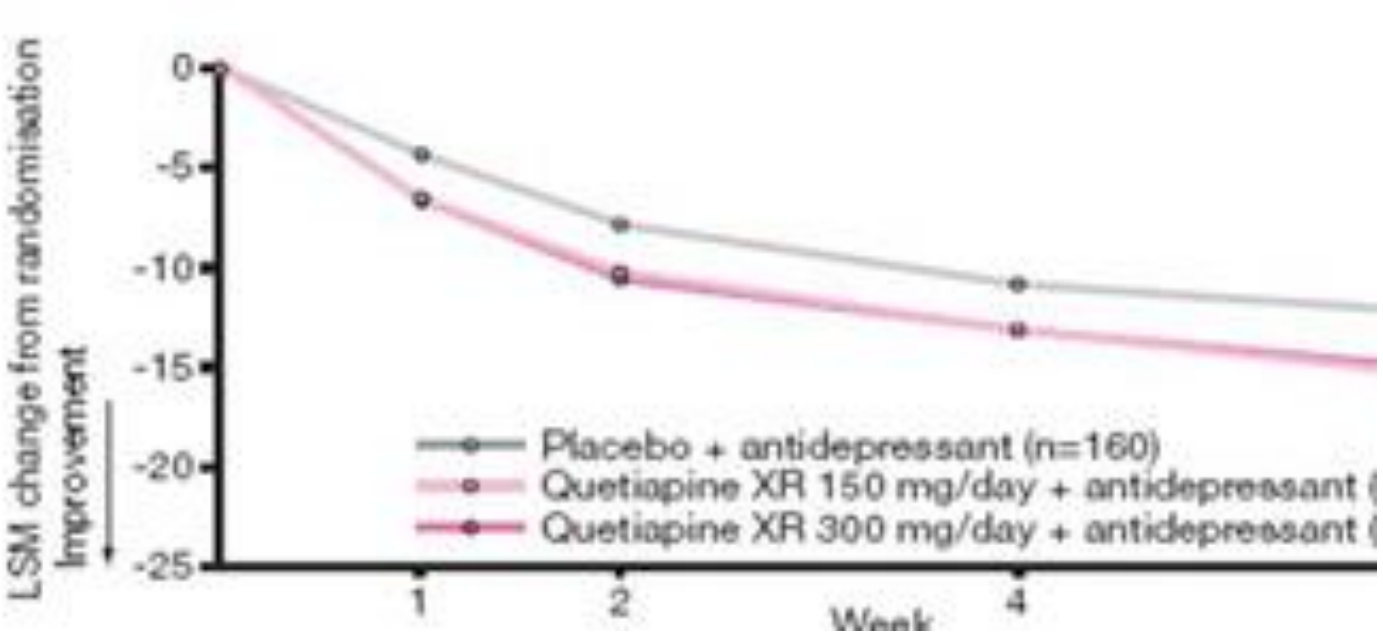
Off Labels - the augmented holy grail

What was Quetiapine is now Aripiprazole

- (a) quetiapine as monotherapy in bipolar depression;
- (b) quetiapine augmentation MDD;
- (c) aripiprazole augmentation MDD;
- (d) olanzapine/fluoxetine for MDD;
- (e) olanzapine/fluoxetine for bipolar
- (f) risperidone and aripiprazole for autism spectrum disorders.

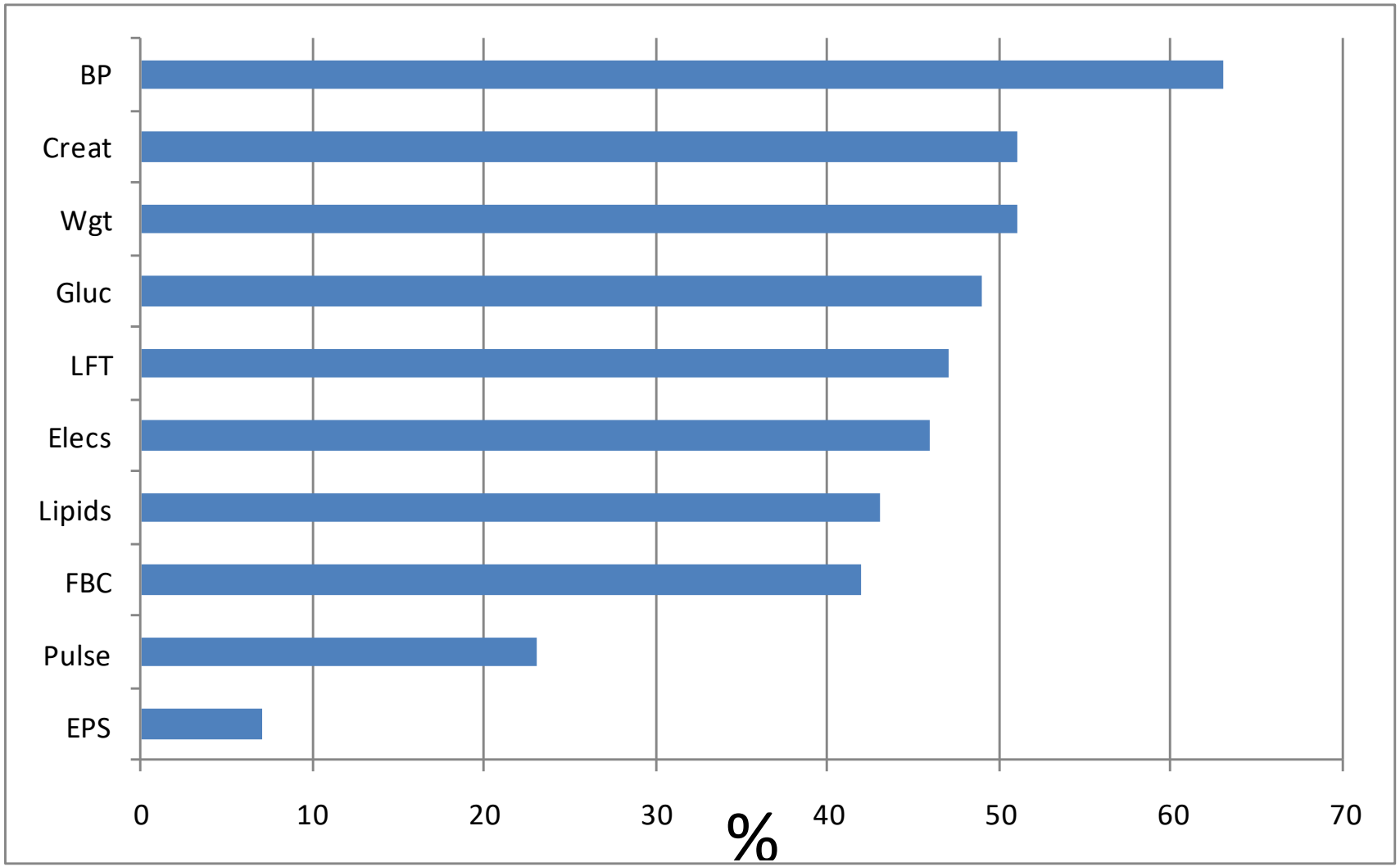
•Maher AR, Theodore G. Summary of the comparative effectiveness review on off-label use of atypical antipsychotics. Journal of Managed Care Pharmacy. 2012 Jun;18(5 Supp B):1-20.

Augmentation Quetiapine



- Quetiapine augmentation – treatment resistant depression
  - Starting low dose 25 mg – up to maintenance 300mg

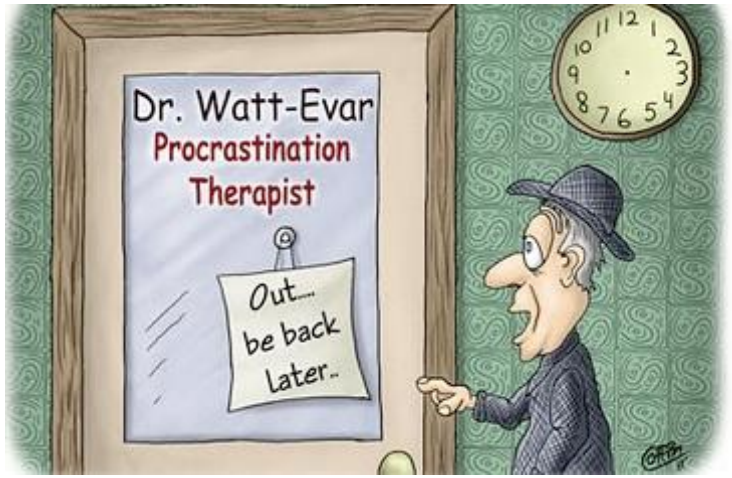
Recommended tests for all Antipsychotics



Psychological Therapy

Yes – they do work

- Brief
- GP / P Nurse
- Therapist
- Clin Psych
- What to do in the consultation

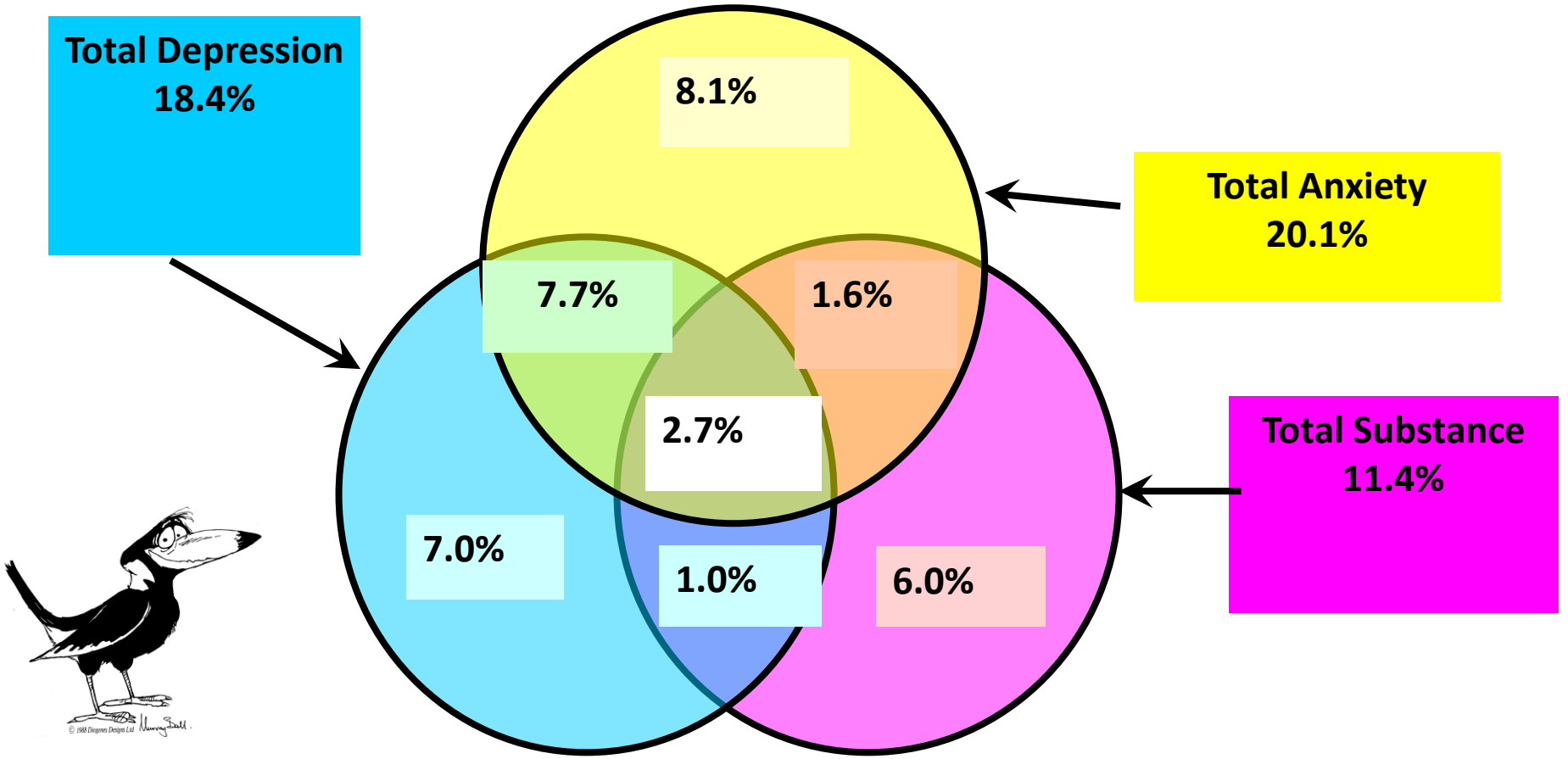


Tailored to what

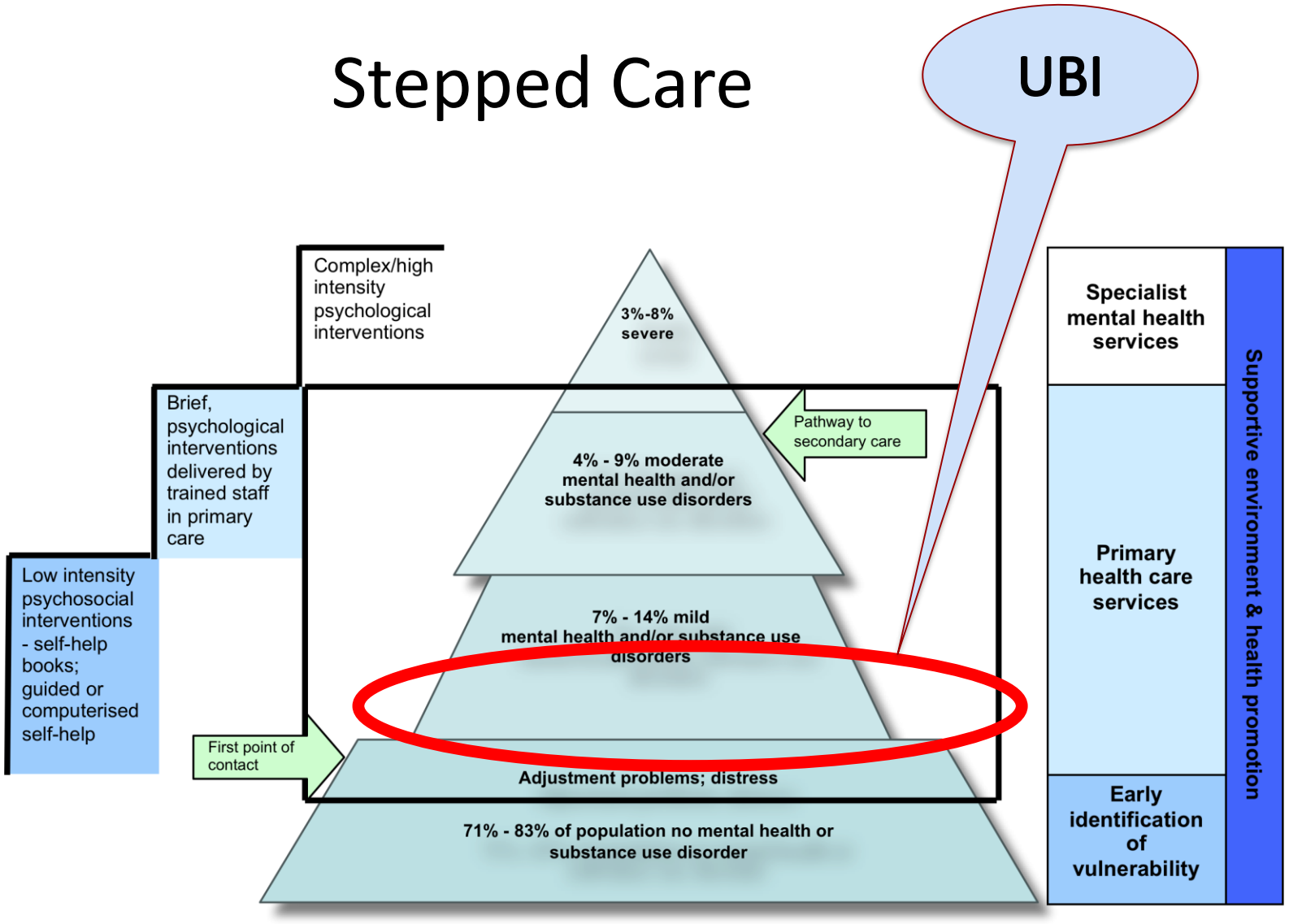
- Anxious Depression
- FSUCLS
- Feeling screwed up ‘cos life sucks
- Substance use
- Bodily stress

Anxiety, Depression and Substance use disorders in General Practice:

Magpie Research Group. The nature and prevalence of psychological problems in New Zealand primary healthcare: a report on Mental Health and General Practice Investigation (MaGPIe). *New Zealand Medical Journal* 2003; 116 (1171)



Stepped Care



Adapted from: Dowell A, Morris C, Dodds T, McLoughlin B. Psychological interventions in primary care mental health. In: Companion to Primary Care Mental Health .Eds Ivibjaro G. 2012. Radcliffe Publishing. London.

3 - 10 minute psychological therapy

A – Identifying ‘**A**ctive ‘problem

B – What **B**eliefs does that produce

C – What Consequences – depression etc

D – **D**ispute the thoughts / belief

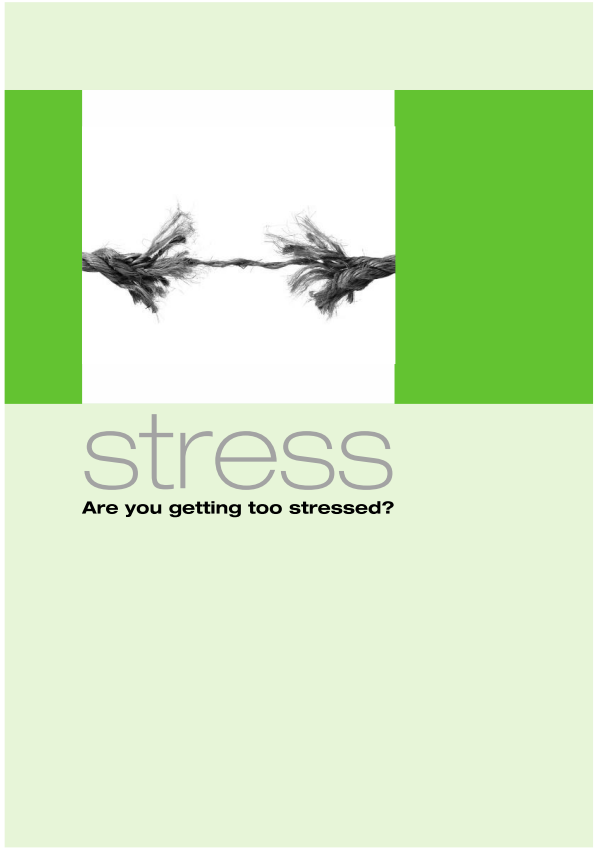
E – Find **E**ffective thinking

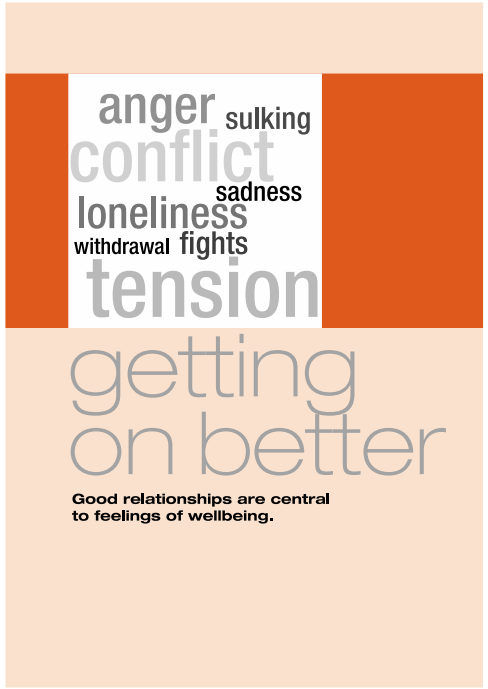
F – Reframe into new **F**eeling

- Identify Problems
- Prioritise Problems
- Choose 1
- Make a work plan to address it
- Review
- Choose another problem

(UBI) Ultra Brief interventions A guided self management approach

- A more structured approach to mental health consultations.
- Setting goals at the end
- Homework
- Guided coaching





Starting off

Objectives: Identify problem areas, prioritise, normalise, instil hope, elicit change talk, summarise, convey to patient that they matter, that they are understood & taken seriously. Involve patient in decision-making. Be systematic.

- Introduction
- Problem identification
- Provide resources

Overall framework

- Assess whether there is a problem

1. Decide whether to change
2. Identify your triggers
3. Use alternative behaviours
4. Encourage patient to find support
5. Keeping the patient on track

Session 1

- Problem identification
- Number of concerns – which one?
- Normalise – “ Lots of people etc”
- Link emotional response to physical symptoms
- Offer hope
- Homework

Session 2 – Review

- Review of initial problem and session
- Identify practical strategies
- Unhelpful / Helpful strategies
- Try to find a practical strategy that fits with the patients goal.
- A plan.
  - Identify and problem-solve practical barriers to completing tasks.
  - Unhelpful and helpful behaviours
  - Commitment and capability rulers
  - Ask Feedback.

Behaviours

- Unhelpful behaviours
- Short term they make us feel better.
- Long term, can backfire and worsen how we, or others, feel.
- They can become part of the problem.

Unhelpful Behaviours

Unhelpful behaviours are used because in the short term they make us feel better. The problem is that in the long term, if used a lot, these behaviours can backfire and worsen how we, or others, feel. They can become part of the problem. The good news is that if this applies to you, you can make changes.

Problem	Unhelpful Behaviour	Good Reason	How it can keep the problem going
Anxiety	Avoidance	Keep safe	Keep fearing situation
Anxiety	Reassurance-seeking	Reduce anxiety	Only temporary relief, lose self confidence
Anxiety	Relying on others	Reduce anxiety	Don't develop self confidence
Anxiety	Procrastination	Reduce anxiety	Feel bad, affects performance
Anxiety	Excessive activity	Avoid bad feelings	Get exhausted
Low mood	Reduce activity	Tired, low energy	Mood drops, feel worse
Low mood	Social withdrawal	Think I'm no fun	Mood stays low
Low mood	Blocking feelings*	Block feelings	Temporary, causes other problems
Worry	Suppress worry	Fear worry harmful	Worry recurs, seems out of control
Health anxiety	Monitor/check body	Spot symptoms	Notice minor / harmless changes
Social anxiety	Avoid interacting	Avoid looking anxious	Limits good interactions
Relationship	Being passive	Avoid conflict	Don't get needs met
Relationship	Complaining	Hope for change	Doesn't work, causes tension
Relationship	Being aggressive	Get what you want	Creates distance & fear
Relationship	Pushing others away	Avoid distress	Problems unresolved / worsen
Chronic physical illness	Reduced activity	Trying to recover	Lose benefits of activity, mood drops
Insomnia	Worry about sleep	Get enough sleep	↑ anxiety, ↑ tension, ↓ sleep
Insomnia	Napping in day	Tired	Disturbed sleep rhythm
Insomnia	Staying in bed awake	Trying to sleep	Brain forgets that: bed=sleep
Fatigue	Resting	Trying to recover	Lose condition
Pain	Reduced activity	Trying to recover	Lose condition

*Blocking feelings can be through alcohol, drugs, gaming, excessive TV watching, eating, spending money, sexual activity, self-harming behaviour, gambling or risk taking behaviour.

10

Unhelpful behaviour

Problem	Unhelpful behaviour	Good reason	How it keeps the problem going
Anxiety	Avoidance	Keep safe	Keep fearing situation
Anxiety	Procrastination	Reduce anxiety	Feel bad – Affect performance
Low mood	Social withdrawal	Think I'm no fun	Mood stays low
Relationship	Complaining	Hope for change	Doesn't work causes tension

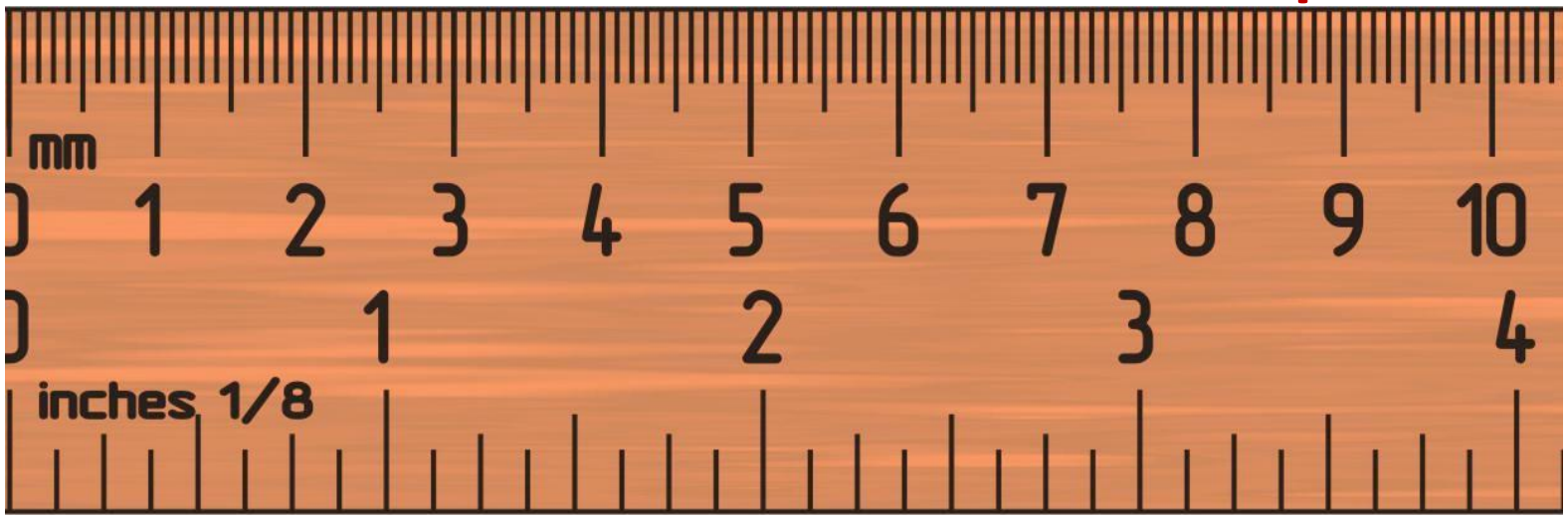
Helpful behaviours

- Helpful behaviours are things you can do that help you to cope. They don't 'undo' unhelpful behaviours. The idea is to reduce unhelpful behaviours and also to increase helpful behaviours.

Helpful Behaviours

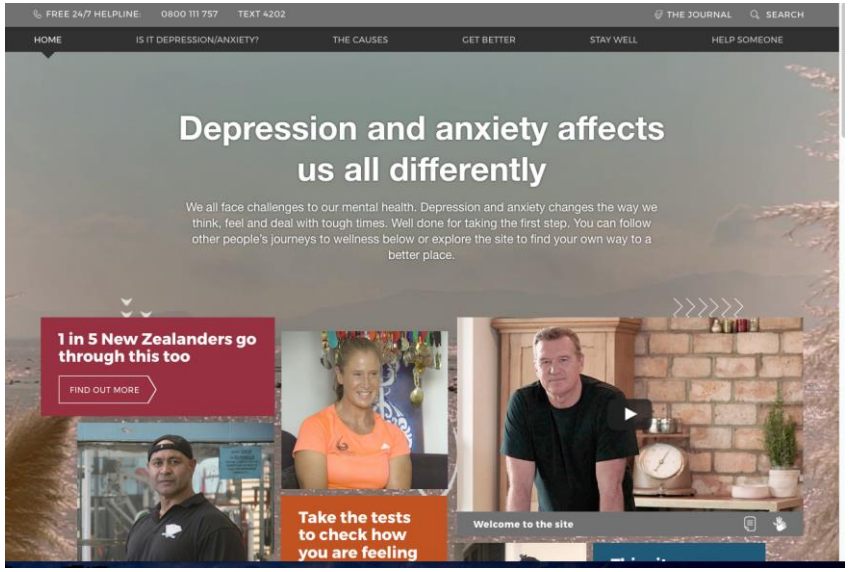
- Being good to myself e.g. eating regularly and healthily
- Doing things for fun and pleasure, e.g. hobbies
- Seeking support from others
- Community support
- Self- help materials Socialising,.
- Reflecting on other ways of seeing things,
- Keeping active
- Sense of humour to cope?
- Planning time for myself
- Prescribed medication regularly
- Relaxation techniques

Changing perspectives
How Committed / How Capable



- How committed are you to making those changes
- X …..
- Why isn’t it zero

The World Wide Interweb



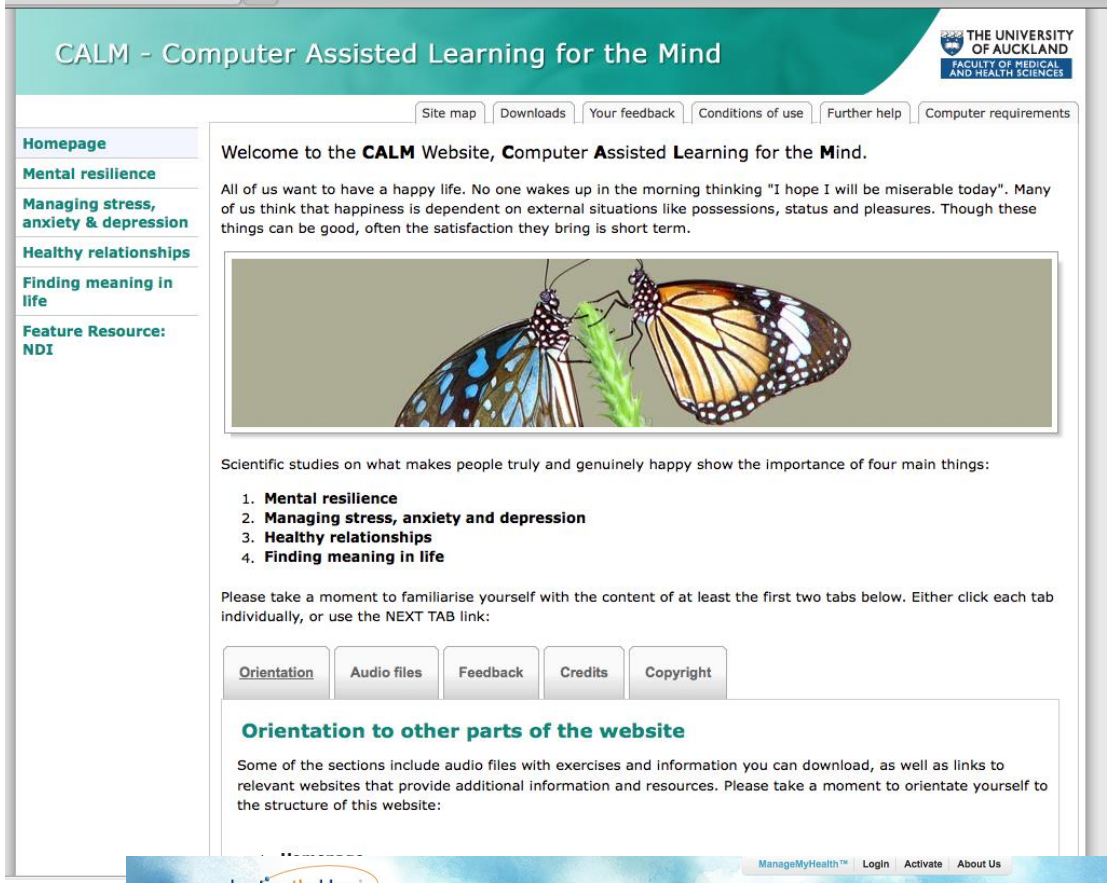
- National Depression Initiative.
- General information
- Journal is guided therapy
- Telephone helpline
- Youth guided navigation site – the Lowdown http://www.thelowdown.co.nz

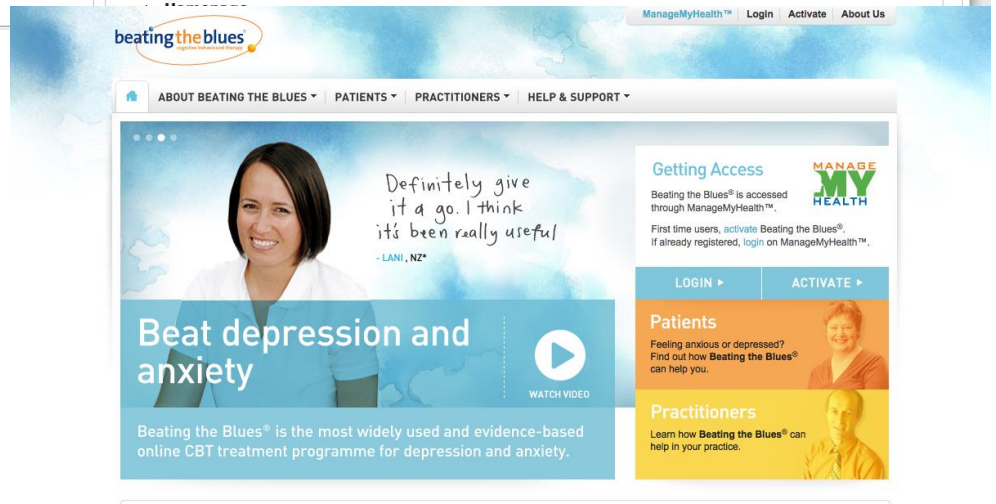
Mental health awareness

- Mentalhealth Foundation www.mentalhealth.org.nz/page/5-home
- Health navigator site
- Depression , anxiety, psychosis www.healthnavigator.org.nz/health-topics/depression/
- Phone Lines

E – therapies

- http://www.calm.auckland.ac.nz/
- http://www.beyondblue.org.au/index.aspx?
- http://www.depression.org.nz
- Beating the Blues
- MOH funded – 8 x 50 minute sessions http://www.beatingtheblues.co.nz





Kids stuff

The origin of mental health problems

Any disorder pre-adolescence = 18%

Any disorder –

Late adolescence = 42%

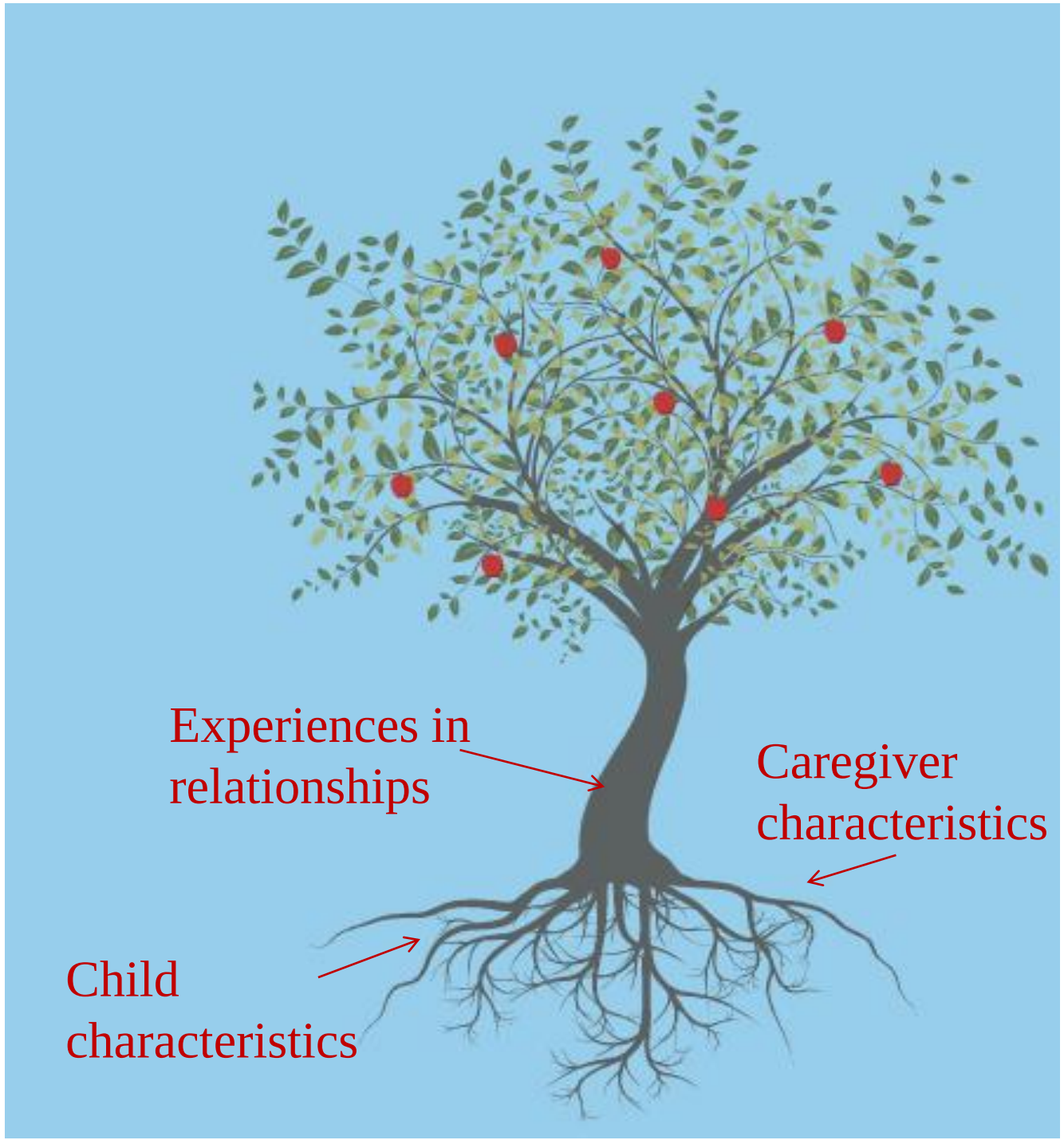
Behavioural assessment in early childhood

Ante-natal – Mum's health

Infancy (0-2years)

- Behavioural and emotional disorders can occur early – Long term impact?
  - 50% behavioural disorder at 2 persist at age 6

Infant mental health



Elements of Infant and Early Childhood Mental Health

Lisa Mennet, PhD – zero to 3

Infants are an open system

Born to learn and ready to adapt to any human culture, babies absorb the range of their experiences, good and bad.

Impact and Influence

- Child
  - temperament
  - genetic endowment
  - medical issues, including prematurity
  - birth order
  - Appearance
- Caregiver
- temperament
- family of origin
- environmental safety
- resources and supports (or lack thereof)
- trauma history
- mental health issues (including post-partum depression)

Experiences in relationships

Abuse

- emotional, physical, sexual

Neglect

- emotional, physical

Household dysfunction

- household substance abuse, household mental illness, Inter partner violence
- Poverty

Separation or divorce

Family member in prison

Symptoms

in infants and toddlers

- physical symptoms (poor weight gain, slow growth, difficulties with toileting, somatic complaints)
- overall delayed development
- inconsolable crying, irritability

Symptoms

in infants and toddlers

- sleep and feeding problems
- aggressive or impulsive behavior
- anxious and withdrawn behavior
- danger-seeking behavior

GP role

- Level of awareness
  - Knowledge of family
  - Previous mental health problems
  - History of previous children
- Opportunistic
- Set piece interactions
  - Well child

Assessing young children - HEARTS

- **H**ome: conduct, general behaviour, ‘manageability’
- **E**ducation : behaviour / progress
- **A**ctivities : attention span, ability to finish tasks, friendships.
- **R**elationships with peers / parents: any changes in the family
- **T**emper : mood
- **S**ize: weight gain , appetite
- Get information from both child and adult


Therapy Cat
is concerned
ICANHASCHEEZBURGER.COM


Thank you for listening

Jack

7 yr old boy presents with mum. Middle child

Concerned about his behaviour since early childhood.

Poor sleep – will wake early (0600).

Sometimes goes to bed late (9 PM)

Temper tantrums – 2 x / week

Rude to peers

Now school has been complaining about his behaviour. – difficult to focus, not telling the truth

Playground game of showing “body parts”

Something must be done ?

Normal Difficult Behavior
Ages 6 to 12

- Arguments/Fights with Siblings and/or Peers
- Curiosity about Body Parts of males and females
- Testing Limits
- Limited Attention Span
- Worries about being accepted
- Lying
- Not Taking Responsibility for Behavior

Cries for Help/More Serious Issues
Ages 6-12

- Excessive Aggressiveness
- Serious Injury to Self or Others
- Excessive Fears
- School Refusal/Phobia
- Fire Fixation/Setting
- Frequent Excessive or Extended Emotional Reactions
- Inability to Focus on Activity even for Five Minutes
- Patterns of Delinquent behaviors

If not normal – what ?

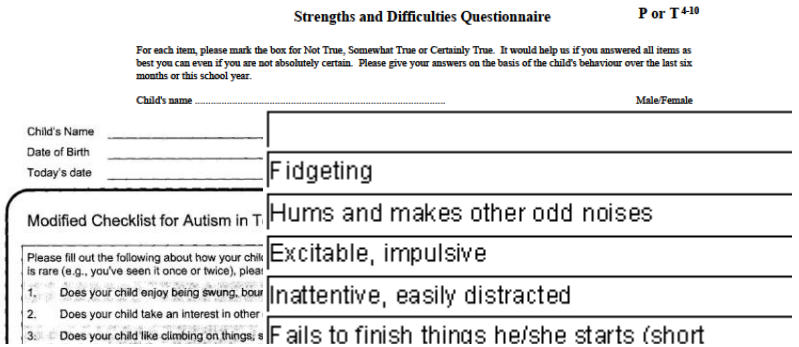
- Anxiety and Depression
- Conduct disorder
  - Oppositional Defiant
- ADHD
- ASD / Aspergers
- Remember the Spectrum

Anxiety and Depression

- Depression
  - 1.9% to 3.4% among primary school children
  - 70% rate of recurrence within five years
- Anxiety
  - Some anxiety is common / normal though childhood
  - Separation anxiety (18/12 – 3 yrs)
  - Panics and fears
  - Minor ‘phobias’
- Excessive (significant) anxiety - 5%
- Co-morbidity up to 75%
- Some evidence that childhood and adolescent anxiety is a prelude to adult depression

Tools

- HEARTS
- HEADSS
- SDQ
- Connors – ADHD
- Conduct Problems Risk Screen (CPRS) – 7 item screen



Strengths and Difficulties Questionnaire P or T 4-10

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of the child's behaviour over the last six months or this school year.

Child's name ..... Male/Female

Child's Name _____
Date of Birth _____
Today's date _____

Modified Checklist for Autism in T

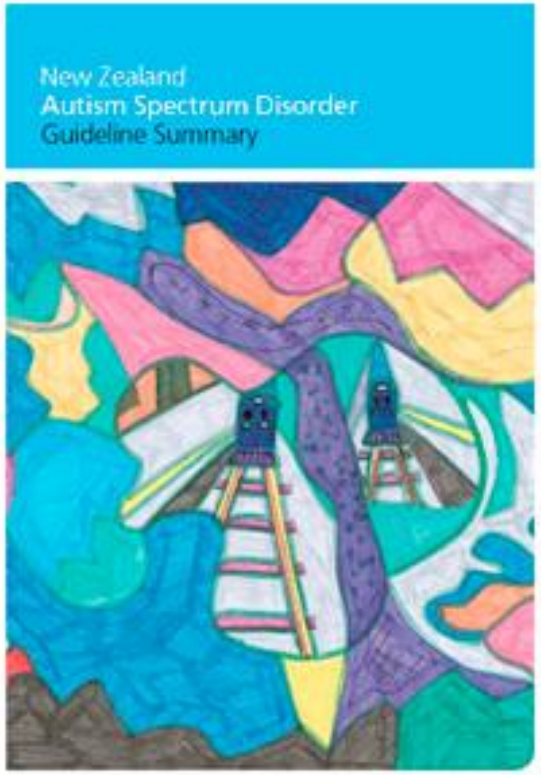
Please fill out the following about how your chil
is rare (e.g., you've seen it once or twice), plea
1. Does your child enjoy being swung, bou
2. Does your child take an interest in other
3. Does your child like climbing on things, s

Fidgeting
Hums and makes other odd noises
Excitable, impulsive
Inattentive, easily distracted
Fails to finish things he/she starts (short

Table 1: The Conduct Problems Risk Screen

		Never	Rarely
1.	Does the child have trouble keeping his/her attention on play/school-related activities?	0	1
2.	How often does the child fight with other children and bully them?	0	1
3.	Does the child have trouble making and/or keeping friends?	0	1
4.	Does the child act before he/she thinks?	0	1
5.	Does the child get upset easily and lose his/her temper?	0	1
6.	Does he/she argue a lot with you?	0	1
7.	Does he/she get into trouble at home/school for not following the rules?	0	1

Autism Spectrum Disorder



Autism Spectrum Disorder

- Single category – Combines Autistic disorder, Aspergers, Childhood disintegrative disorder, PDD. (DSM V and ICD-11)
- 1 / 100 - 200 children. Boys 5 times girls.
- ASD children do feel emotion – difficulty in expressing
- Dapretto, M.et al.(2006). Understanding emotions in others: mirror neuron dysfunction in children with autism spectrum disorders. *Nature neuroscience*, *9*(1), 28-30.)
- Social interaction important
- IT helpful , but caution socially isolating gaming
- All children ASD immunised
- Late maturation of ASD traits

ADHD

Assessment

Practice Point!

It is difficult to make a diagnosis in general practice and often requires a team approach.

1. Consider a diagnosis of ADHD if for at least 6 months the child has:
   - 6 out of 9 inattention symptoms, and/or
   - 6 out of 9 hyperactivity or impulsive symptoms.

and:

- symptoms present before age 12 years.
- impairment in two or more settings e.g., school, home.
- significant impairment in social, academic, or occupational functioning.
- not better accounted for by any other disorder.

ADHD

- 1-16% depending on criteria used
- 3-5% prevalence in school-age children
- Male: female ratio is 3:1 to 10:1
- Occurs more frequently in lower SES
- Genetic / Foetal alcohol / v low birth weight
- No evidence for elimination diets
- Drug therapy – Not in pre-school
- Methylphenidate with Atomoxetine as second choice