

For Research & Training in Youth Health & Development

# Youth Development Pharmac Seminar October 2017



### Christchurch School of Medicine





#### The Collaborative Trust



#### Vision

Healthy well-developed young people in Aotearoa New Zealand.

#### **Mission**

to ensure the healthy development of young people by:

- providing excellent training for people who work with youth
- conducting research and evaluation in youth health and development
- informing and influencing policy and practice



# **Youth One Stop Shop**

#### 198 Youth Health









## The Youth Hub

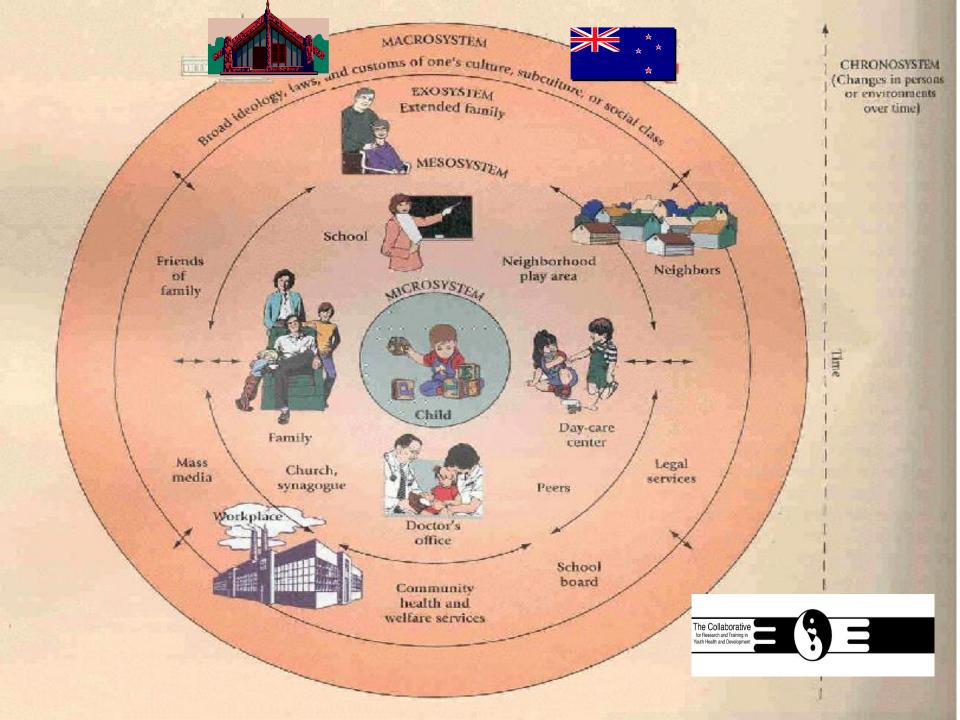




#### Socio-Cultural Framework

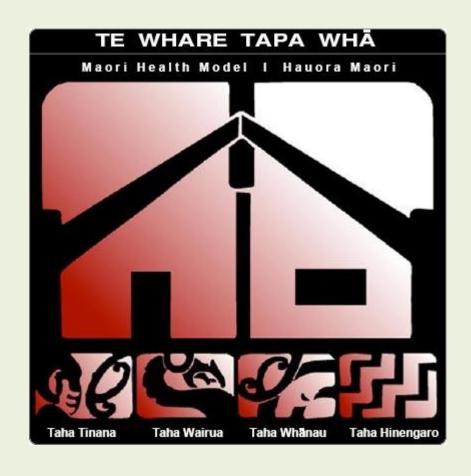
 Development as a dynamic, multifaceted, complex active process across integrated levels of context:

- Historical time
- Social context
- Cultural context
- Individual
- Family
- Peers
- Community



# **Domains of Development**

- Biological
- Cognitive
- Social Emotional
- Spiritual



# DEAR PARENTS,

DIRTY HOMELESS BOY NAMED ALADDIN, SNOW WHITE LIVED ALONE WITH 7 MEN. OCHIO WAS A OD WAS A THIEF WALKED AROUND WITHOUT CLOTHES ON A STRANGER KISSED SLEEPING BEAUTY AND SHE MARRIED HIM ERELLA LIED AND SNUCK OUT AT NIGHT TO ATTEND A PARTY.

YOU CAN'T BLAME US.
WE WERE TAUGHT TO REBEL SINCE WAY BILLING CONFERN

#### Remember When?

What impact did your parents, school and community have on you?

What is the difference between then and now?





# Family Context Parenting style (Beaumrind)

Authoritarian

= Inconsistent warmth/high control

Authoritative

Consistent warmth / negotiated control

Permissive

= Inconsistent warmth low control

Neglectful

= No warmth /no control

Helicopter

= I want to be your friend



# Adolescence defined Physiological

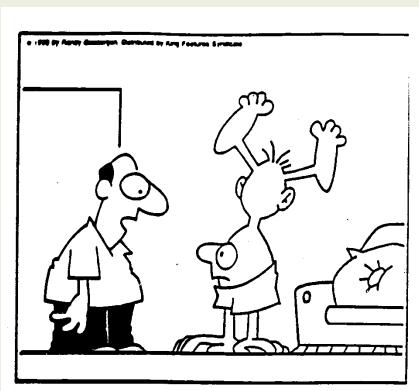
- The developmental period between childhood and adulthood.
- Beginning with the changes of puberty – takes about 3 years range 8-16 gender related
- Culminating in the end of development with the connection of frontal lobes range 18-27??
- Assumption of adult roles socially, legally, financially, relationally



"No, Jimmy, the Tooth Fairy won't be visiting you anymore. I'm the Pimple Fairy!"



# **All about Development**



'You're a teenager now, Lester. Your body is changing in ways that are hard to understand

#### Major physical changes

- 25cm height, 50% ideal adult body weight
- 2ary sexual characteristics

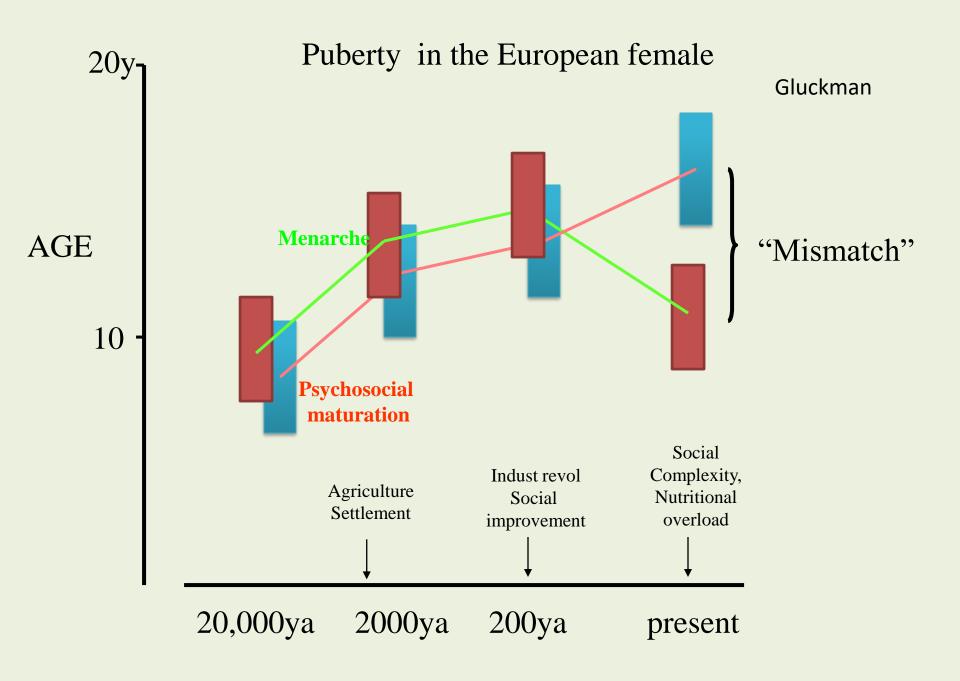
#### Cognitive Changes

- Future thinking
- Abstract thought
- Complexity of thought

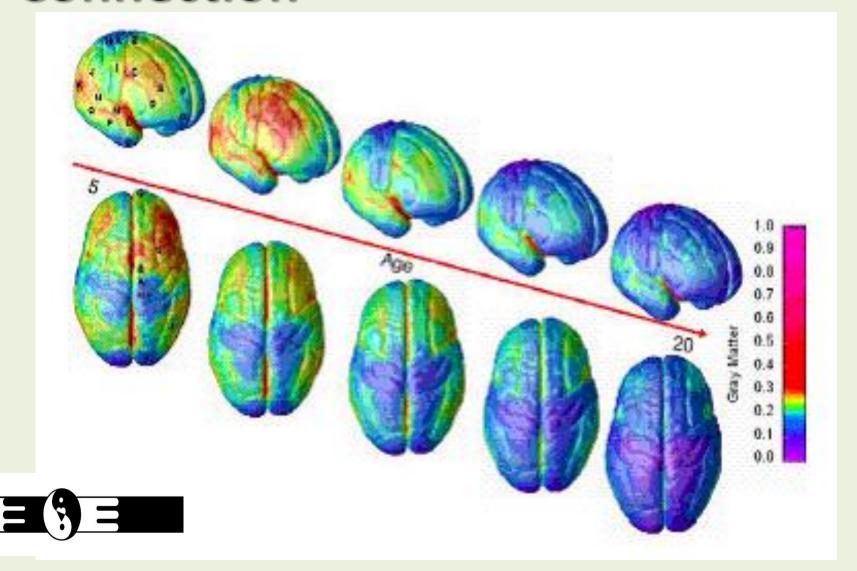
#### **Social Changes**

- Family
- Friendships
- Groups
- Sexual attraction,
- Pairing off

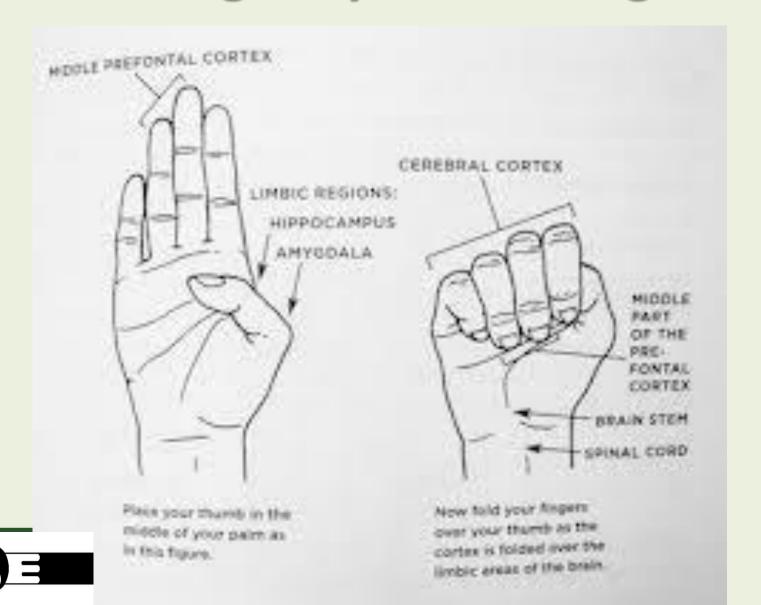




# Red = Grey matter Blue = Connection

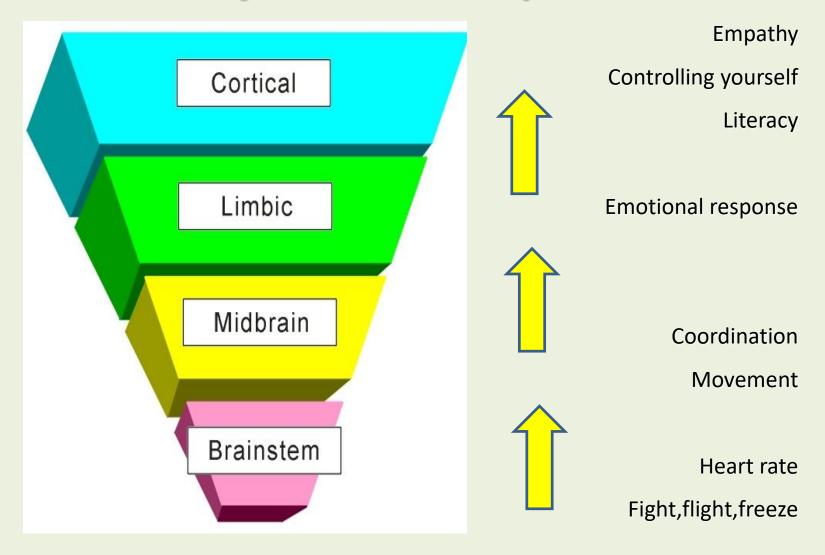


# Mindsight by Daniel Siegel



The Collaborative

## Perry's Neurosequential Model



Perry, B.D. (2002). Brain Structure and Function I: Basics of Organisation. Adapted in part from "Maltreated Children: Experience, Brain Development and the Next Generation (W.W. Norton & Company).

# Teens think with their Amygdala

- Sensing emotions
- Fear
- Threat
- Danger





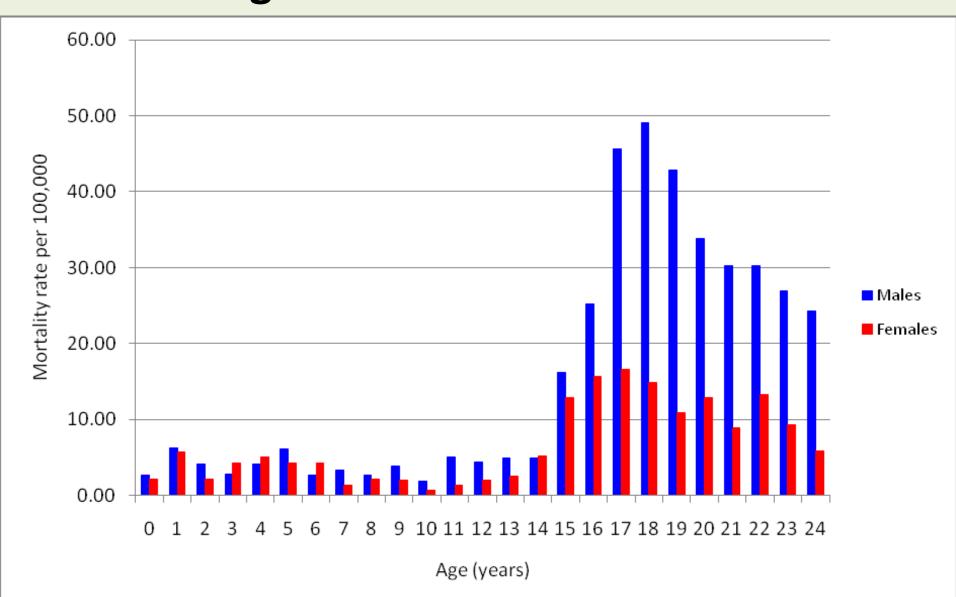
# **Challenges in Brain Development**

- A Dopamine Deficiency syndrome
- GABA
- Frontal lobe disconnection
- Overload of Oxytocin
- Sex Hormones
- Mismatch of different bits developing at different times





# Unintentional death rate, by age and gender 2003–2007



#### Vulnerability

- Parental ill health
- Parental alcohol & drug use
- Poverty
- Peer group in trouble
- Frequent moves
- Personality factors
- bullying
- Intelligence level
- Disability
- Mood problems

#### **Risky Behaviour**

- Fast driving
- Abuse of alcohol and other drugs
- Too much, too often
- Taking risks under the influence of a drug
- Early unsafe sex
- Stealing
- fighting

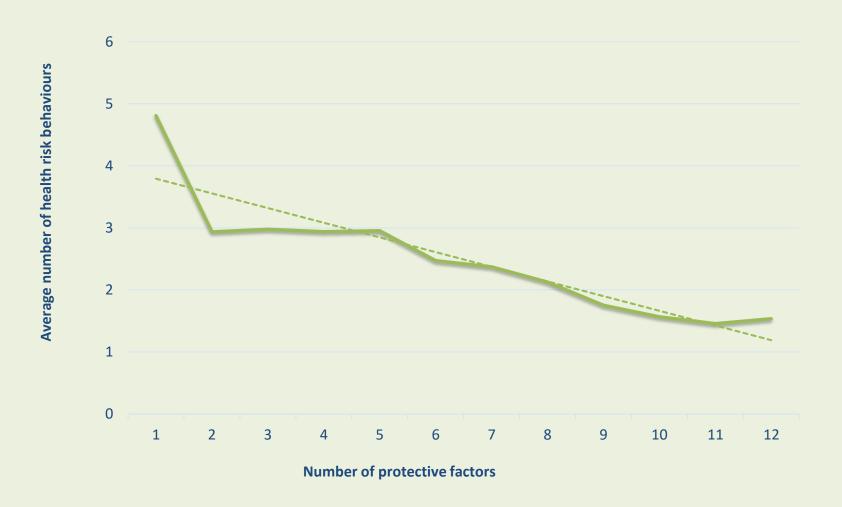


#### **Protective or Resilience Factors**

- Connectedness to Family
- People to talk to
- Connected to a Caring adult
- Belongs to Groups
- Connected to School
- School completion, and qualifications
- Developing a skill
- Healthy sexuality and relationships
- Participation in and contribution to the community
- Employment



# Protective factors are associated with fewer health risk behaviours





#### Connectedness Barber et al 2008

- Connection a tie that provides a sense of belonging – consistent, positive, predictable, loving support
- Regulation appropriate structure around behaviour, adjust, adapt, organise and supervise behaviour
- Respect for Individuality avoid intrusion on psychological autonomy
- Focus on what environments and relationships can achieve

## **Legal Issues**

Consent – based on competency not age

Gillick Competency

- **Fraser's Ruling**: Allowed to supply contraception if:
- The young person is competent to give consent
- The young person would continue to have intercourse in spite of your advice
- You have encouraged the young person to inform their parents
- You have established that they are not being abused

# Confidentiality

An agreement between patient and health practitioner, that information discussed will not be shared with other parties without the explicit permission of the patent

Exceptions

The Three Harms – to self, to others, being harmed by others



So I can help you better

#### **HEADSS**

- Home
- Education
- Employment
- Exercise
- Eating (teeth)
- Activities (screens)
- Adverse child Experiences

- Drugs
- Sexuality
- Suicide/Mental Health
- Spirituality/Culture
- Safety
- Strengths

Berman, Goldenring and Cohen

### **Adverse Childhood Experiences**

- Growing up (prior to age 18) in a household with:
- Recurrent physical abuse.
- Recurrent emotional abuse.
- Sexual abuse.
- Emotional or physical neglect.

- An alcohol or drug abuser
- An incarcerated household member.
- Someone who is chronically depressed, suicidal, institutionalized or mentally ill.
- Mother being treated violently.
- One or no parents.



# Results www.cdc.gov/nccdphp/ace www.acestudy.org

- Involved 17,000 people over 10 years in the US mostly white middle class
- What proportion of adults in the US have an ACE score of 0?
- What proportion had 2?
- 4?



# Adverse Childhood Experiences are Common

#### Of the 17,000 HMO Members:

- 1 in 4 exposed to 2 categories of ACEs
- 1 in 16 was exposed to 4 categories.
- 22% were sexually abused as children.
- 66% of the women experienced abuse, violence or family strife in childhood.



Categories	Behaviors to Ease the Pain	Unaddressed Trauma (ACEs)
Abuse of Child  Recurrent Severe Emotional abuse Recurrent Physical abuse Contact Sexual abuse  Trauma in Child's Household	Neurobiologic Effects of Trauma  Disrupted neuro-development Difficulty controlling anger-rage Hallucinations Depression	Disease and Disability  Ischemic heart disease  Cancer  Chronic lung disease  Chronic emphysema
Environment  Substance abuse Parental separation or divorce - Chronically depressed, emotionally disturbed or suicidal household member  Mother treated violently Imprisoned household member  Loss of parent – (by death, by suicide, - or by abandonment)  Neglect of Child Abandonment Child's basic physical and/or emotional needs unmet  * Above types of ACEs are the "heavy end" of abuse.	<ul> <li>Panic reactions</li> <li>Anxiety</li> <li>Multiple (6+) somatic problems</li> <li>Sleep problems</li> <li>Impaired memory</li> <li>Flashbacks</li> <li>Dissociation</li> <li>Health Risk Behaviors</li> <li>Smoking</li> <li>Severe obesity</li> <li>Physical inactivity</li> <li>Suicide attempts</li> <li>Alcoholism</li> <li>Drug abuse</li> <li>50+ sex partners</li> <li>Repetition of original trauma</li> <li>Self Injury</li> <li>Eating disorders</li> <li>Perpetrate interpersonal violence</li> </ul>	<ul> <li>Asthma</li> <li>Liver disease</li> <li>Skeletal fractures</li> <li>Poor self rated health</li> <li>Sexually transmitted disease</li> <li>HIV/AIDS</li> <li>Serious Social Problems</li> <li>Homelessness</li> <li>Prostitution</li> <li>Delinquency, violence, criminal behavior</li> <li>Inability to sustain employment</li> <li>Re-victimization: rape, DV</li> <li>compromised ability to parent</li> <li>Intergenerational transmission of abuse</li> <li>Long-term use of health, behavioral health, correctional, and social services</li> </ul>

Impact of Trauma and Health Risk

**Long-Term Consequences of** 

**Adverse Childhood Experience\*** 



Mechanisms by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

#### Use of HEADSS

- Move from the less sensitive to the more sensitive
- Move from the third person approach to the personal
- Avoid Dunno (Descriptions)
- Be keen to get to know this person
- Link Questions

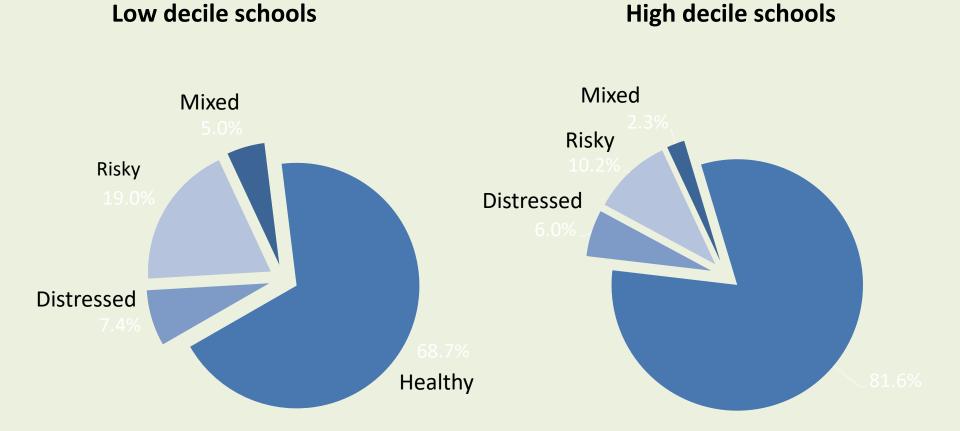
- What is important?
- What stage of cognitive development – future thinking, concrete/abstract thought, complexity of thought
- Where in journey of becoming an adult – home, education, employment

#### Youth '07 Counties Manukau

- Decile 1-3 schools v 7-10
- Very little difference
- 60-70% no risk behaviours
- Alcohol use the same
- Depression and self-harm the same
- Aggressive behaviours sl higher in low decile

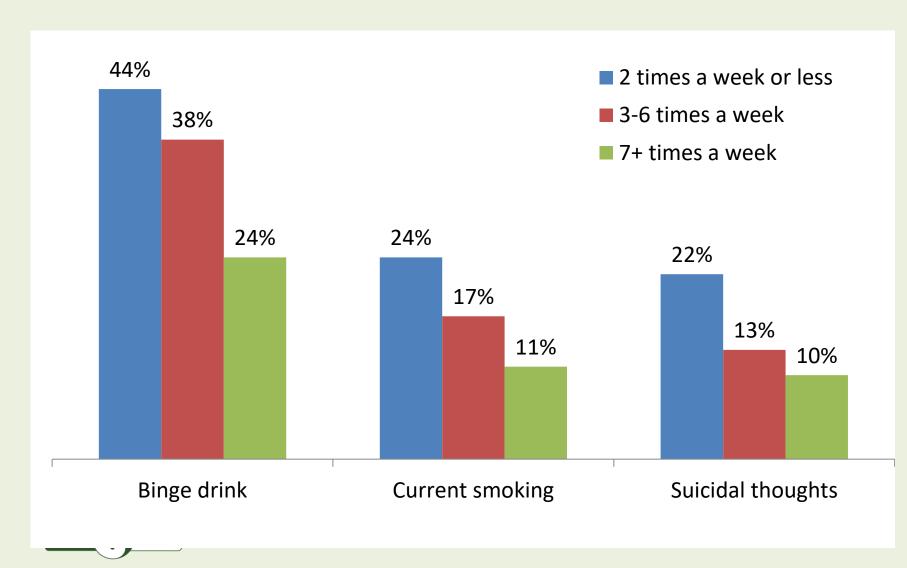
Secondary school students attending school within CMDHB Health concerns by school decile (n = 1529)

Low decile schools



Source: Youth07 CMDHB Data

## Family Meals and Risks



# **Decision Making**



# **Implications**

- Cognitive development involves a range of capabilities, skills and development
- Adolescents engage in risky behaviours despite knowing the risks
- ➤ Risk behaviours are expressed within a social and environment context
- Cognitive decision making involves affective processes or 'gut feelings'



Knowledge alone is not sufficient



Efforts to enhance adolescent development should be strengths based and teach competencies



➤ Interventions need to be ecological



➤ Peers, families and communities are protective when they are prosocial and connected to the adolescent

# Alcohol – the role of Family

Cartoonist's view — Tremain



# **Memory and Alcohol**



### **REASONS FOR DRINKING**





Celebrate, Relax

Drown Sorrows, Selfmedicate

- Youth 12 report shows alcohol, tobacco and cannabis use have all declined since 2001
- Smoking 53% 23% (ever tried)
- Smoking weekly 16% 5%
- Binge drinking in the last 4 weeks 40%-23%
- Ever tried cannabis 39%-23%
- Current use cannabis 4.7%-3%
- Party drugs 4% others 1%

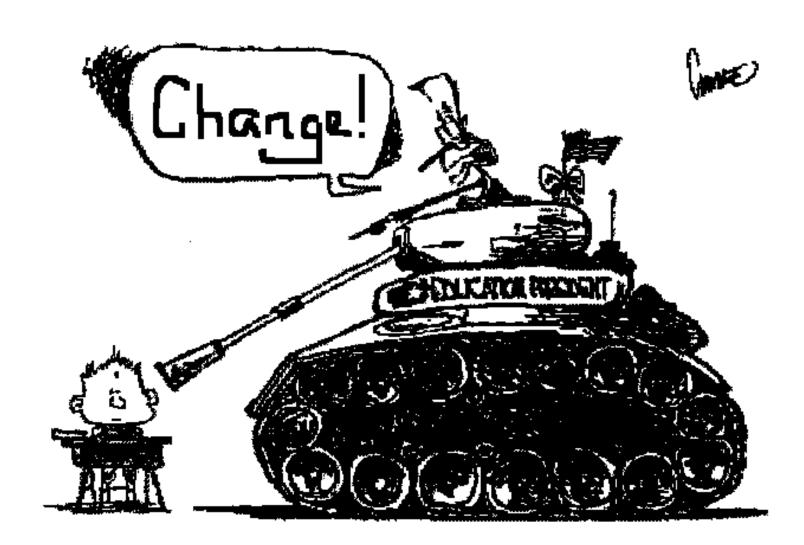
# **Alcohol and Other Drugs**

#### **CRAFFTS**

- Car driven with driver drunk or high
- Relax use to relax, fit in, feel better
- Alone use by yourself
- Forget forget what you did when using
- Family and Friends- tell you to cut down use
- Trouble gotten in to trouble while using
- Stagger

A score of 2 is considered a positive screen





# **Motivational Interviewing**

- BEARDS
- Bite your tongue
- Express Empathy
- Avoid argumentation
- Roll with resistance
- Deploy discrepancy
- Support self efficacy

# "So.... I don't give a stuff"

- The problem (in the clinician's eyes) may be a solution for the young person
- What is important to the young person
- Motivational interviewing strategies
  - Precontemplation
  - Contemplation

# **The Continuum**

#### **Mental liness**

- Criteria in DSM IV
- Affects ability to function
- A diagnosis linked to treatments

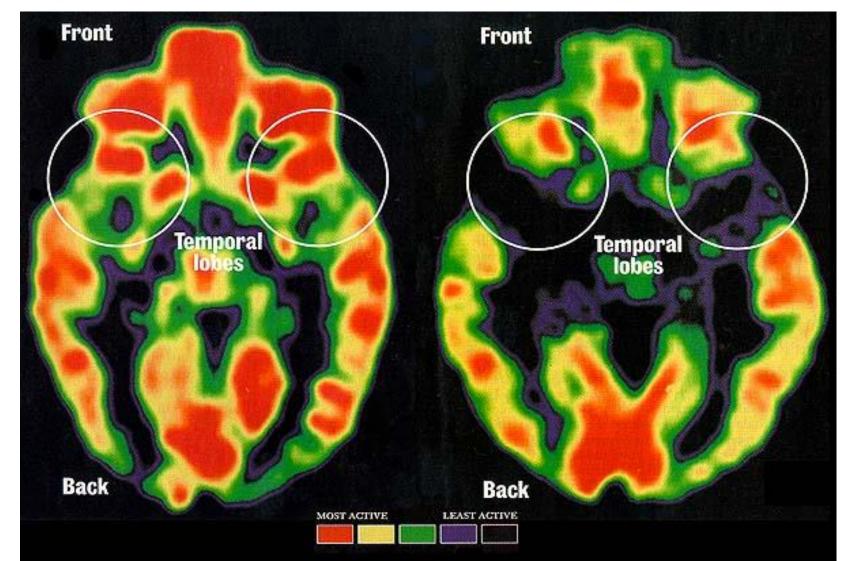
Stress & Distress

### **Mental Health**

- Can deal with relationships
- Resilient
- •Able to communicate
- Needsmaintenance



# Effects of Trauma, abuse and neglect on the developing brain



### **Common Disorders**

- Depression
- Anxiety
- Bipolar
- Schizophrenia
- Substance use disorders
- Eating disorders

- ADHD
- FASD
- Psychosomatic presentations
- Borderline personality disorder
- Post traumatic stress disorder
- Antisocial Personality Disorder / Conduct Disorder
- Autism spectrum disorder

# Why self harm?

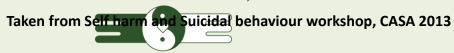
when a young person self harms their intent or purpose is not to die

### Intent, purpose or function......

- to manage difficult emotions such as tension, anger, anxiety and sadness
- to help feel calm and get a sense of release or relief
- to punish themselves/manage self directed anger
- to feel something when they otherwise feel numb
- to access support, seek help or attention
- for excitement/exhilaration-to be part of a peer group



**COPING** strategy

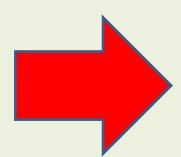




# Why suicidal behaviours?

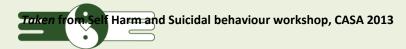
### **Emotional pain that they:**

- can't stand
- can't see ending
- can't see a way to solve



Suicidal behaviour becomes a **problem solving** strategy

a 'permanent' solution to a 'temporary' problem

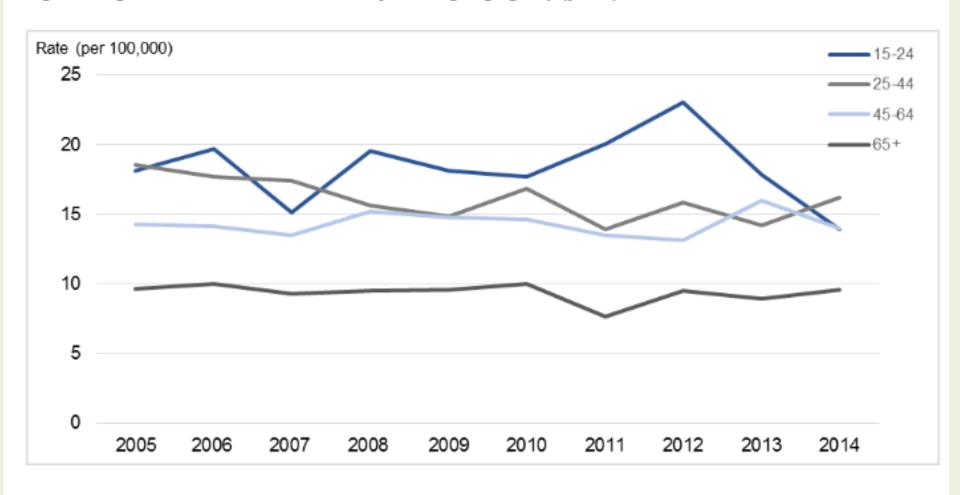




# New Zealand suicide rate by age

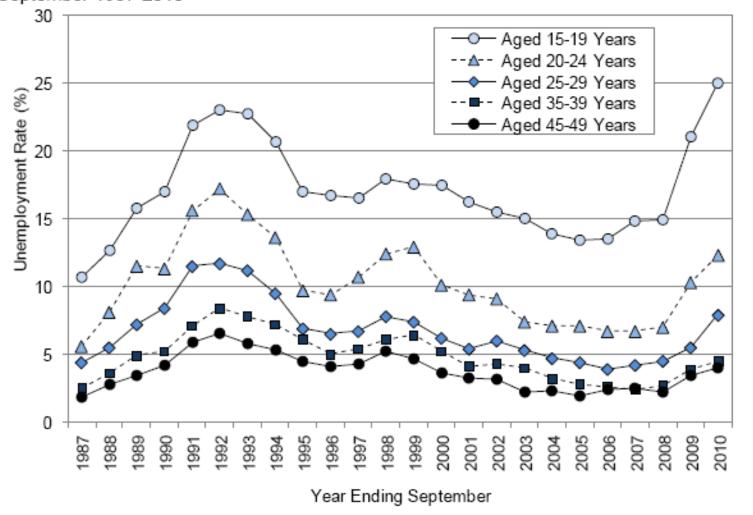
The highest rate of suicide was among people aged 25–44 years (16.2 per 100,000). The rate of youth suicides in 2014 dropped below the rate of suicide among people aged 25–44 years for the first time since 2007, continuing the decreasing trend for this age group since in 2012 (Figure 3).

Figure 3. Age-standardised suicide rates, by life-stage age group (years), 2005–2014



# Unemployment

Figure 83. Annual Unemployment Rates by Age (Selected Age Groups), New Zealand September 1987-2010



Source: Statistics New Zealand Household Labour Force Survey.

# Depression: Youth 2000 study

 Symptoms of depression: worse in Asian students, same sex attracted and AE students

- Symptoms improved if well connected
- Suicide attempts highest amongst AE girls and same sex attracted students

# Differences between Grief and Depression

- Grief tends to come and go "like a wave"
- Grief pines and yearns, depression preoccupies
- Grief is about loss, depression may not be
- PTSD is usually a reaction to trauma and involves: flashbacks, nightmares, avoidance, emotional numbing and heightened states of arousal

# **Red Flags for Suicide**

### **Risk Factors**

- Previous Suicide Attempt
- History of a Prior or Ongoing Psychiatric Disorder
- History of Sexual or Physical Abuse
- History or Exposure to Violent Behaviour
- Family History of Suicidal Behaviour or Mood Disorders
- Biological Factors, Including Male Sex and Gay or Lesbian Sexual Orientation

### **Precipitating Factors**

- Substance abuse
- Access to firearms or other means
- Social stress, such as interpersonal conflicts with friends, family, or law enforcement
- Emotional factors, such as feelings of despair or hopelessness

# Prediction of suicide attempt

### males

- 3 risk, 0 protective: 20%
- 3 risk, 3 protective: 4%
- 0 risk, 3 protective: <1%

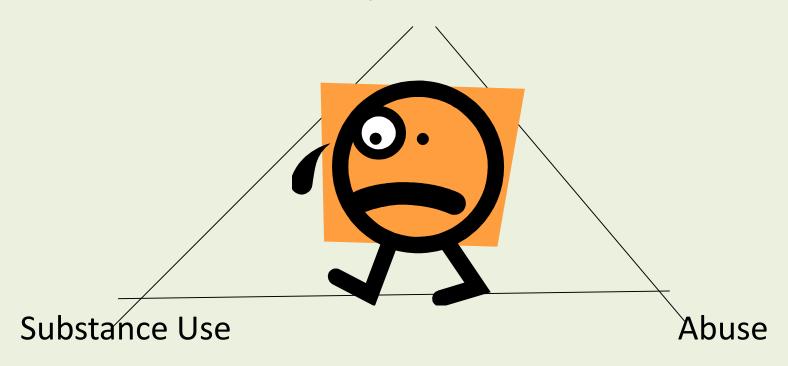
### females

- 3 risk, 0 protective: 30%
- 3 risk, 3 protective: 8%
- 0 risk, 3protective: <1%



# **Common Triangle**

### Depression





# When the Solution is the Problem

- Charles: 15 year old youngest of 3 boys, shy
- Eldest brother is sporty, middle is brainy
- Follows his brothers to a "good school"
- Doesn't live up to their example

#### Solutions for Charles?

- Get "depressed"
- Get confidence = Drink lots of alcohol
- Don't go to school and smoke dope with the others who drop out
- Get good at something else like stealing

# **Attention Seeking?**

- Jenny feels low, father is a strict disciplinarian, mother tries to be nice
- No one listens
- What does Jenny do?

- Talk to friends they move/reject
- Talk to grandparents they move/die
- Feel more low
- Go to GP with headache
- Get paracetemol
- Over dose

# Do's and Don'ts

- Don't tell me I look too good to be depressed
- Don't tell me you know how I feel
- ▶ Don't tell me about the person you know who has the disorder but is managing fine

- Don't tell me "to snap out of it" etc
- Don't tell me happiness is a choice (I would have chosen it)
- Don't tell me not to worry or this is a passing phase
- Don't ask me how I feel
- ▶ Don't tell me about the latest cure
- Don't give up on me



# Do's and Dont's

- Do learn all you can
- Do let me know when you are available to help
- Do understand why I cancel plans
- Do continue to invite me
- Do continue to call me
- Do send cards and notes/txts

- Do offer me lots of hugs and encouragement even when I withdraw
- Do feel you can ask about my appointments but don't ask me if I'm taking my medication just because I'm upset about something
- ▶ Do let me know that you understand or can relate

# **CBT** for Idiots



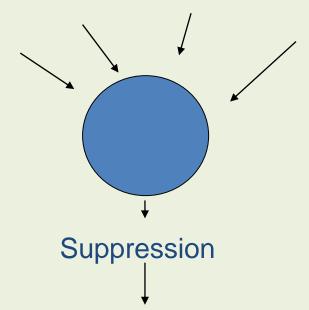
# The 4/5 E's

Indicate positive
Eg adult to talk to
In a sport
Belong to a group

Cold

'Flu

Oppression



Depression/low mood

Illness

5E's

Expression

Eating

Exercise

Encouragement

Energy – mental meds

(Serotonin Increase)



# Celebrate the Diversity of People

BEFORE THE PARTY.



AND I HOPE SHE LIKES ME TOO
AND WE TALK AND THEN KISS
AND THEN LEAVE TOGETHER
AND GO TO MY HOUSE OR
HER LOVE
MAKE LOVE
MAKE NIGHT ME TOO
ALL
WOOD

WOO



