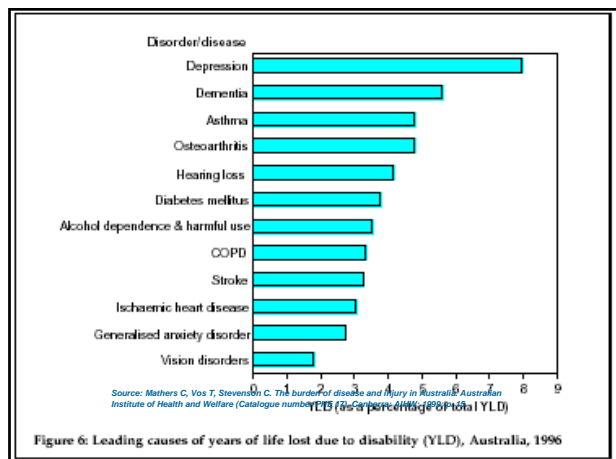
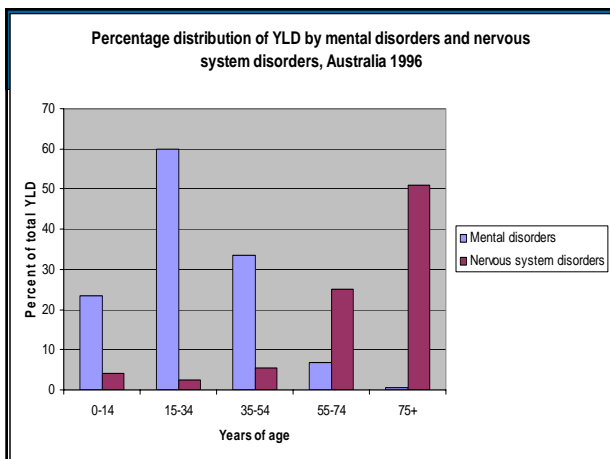
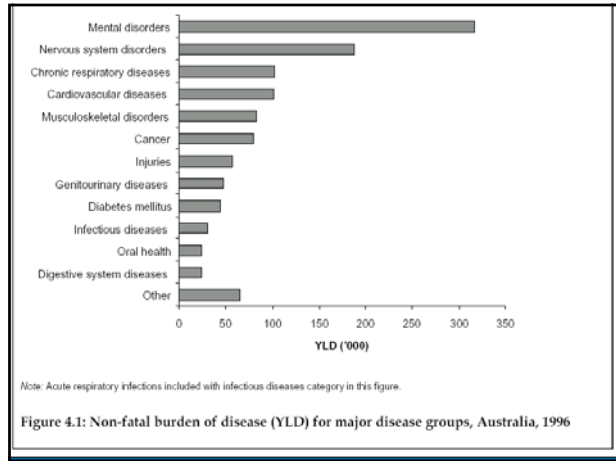


Responding to the challenge of brain and mind disorders in Australia

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What does depression cost the community? - II

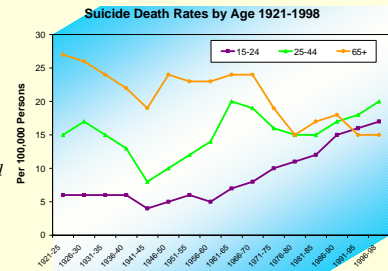
The 10 leading causes of disease burden (DALYs) in Australia in 1996.

DISEASE	PERCENT OF DALYs†
1. Ischaemic heart disease	12.4
2. Stroke	5.4
3. Chronic obstructive pulmonary disease	3.7
4. Depression	3.7
5. Lung cancer	3.6
6. Dementia	3.5
7. Diabetes mellitus	3.0
8. Colorectal cancer	2.7
9. Asthma	2.6
10. Osteoarthritis	2.2

† Disability-adjusted life year (DALY) is a measure of the years of 'healthy' life lost due to illness or injury (one DALY is one lost year of 'healthy' life).
Source: Mathers C, Vos T, Stevenson C. The burden of disease and injury in Australia. Australian Institute of Health and Welfare Catalogue number PHE 17). Canberra: AIHW; 1999.

Suicide in Australia

- While the overall rate is unchanged, there has been a major shift in the age mix
- Rates have decreased for older people but increased for younger age groups
- Most significant rising trend is in the 15-24 year age range, particularly amongst males



Source: Australia Bureau of Statistics, March 2000

How common is depression in the Australian community? - II

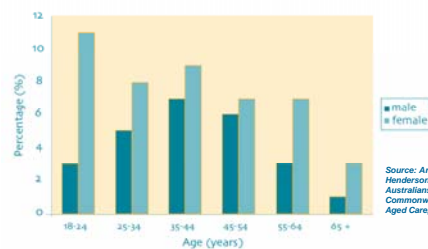
Twelve-month prevalence of mental disorders in Australian adults

	MALES		FEMALES	
	%	Population estimate	%	Population estimate
Any depressive disorder	4.2	275,300	7.4	503,300
Any anxiety disorder	7.1	470,400	12.0	829,600
Any substance use disorder	11.1	734,300	4.5	307,500
Any mental disorder	17.4	1,151,600	18.0	1,231,500

Source: Andrews G, Hall W, Teesson M, Henderson S. The mental health of Australians. Mental Health Branch, Commonwealth Department of Health and Aged Care, 1999.

Who gets depressed?

Prevalence of any affective/anxiety disorder by age and sex



Source: Andrews G, Hall W, Teesson M, Henderson S. The mental health of Australians. Mental Health Branch, Commonwealth Department of Health and Aged Care, 1999.

Patterns of comorbidity

- Early ages
 - Anxiety
 - Cannabis, alcohol, nicotine
 - Eating disorders, obesity under-exercise
- Mid-life:
 - alcohol, gambling, relationship difficulties
 - Heart Disease: MJA: 2003
- Older age
 - Physical illness, vascular disease, cognitive impairment

Key Numbers

- 62% of current cases do not get any mental health intervention
- 75% of those who do receive care are dealt with in primary care
- 15% of those with common disorder receive any evidence-based intervention
- Aus \$650million/year direct treatment costs

Investing in Australia's Future

- 2004: MHCA Report (Hickie, Groom, Davenport)
- Total (2002) Costs: \$13 billion annual
 - Direct Costs: \$2.6 Billion
 - Indirect Costs: \$10.4 billion
 - 4x1 multiplier:
 - Low return to work
 - High Disability support – welfare
 - Consumer and family burden

Workplace costs

- Depression alone
 - 6 million full day lost
 - 12 million partial days lost
- DSP participation
 - <30%
 - OECD best practice: 50-60%
 - Lower than mental retardation and brain injury

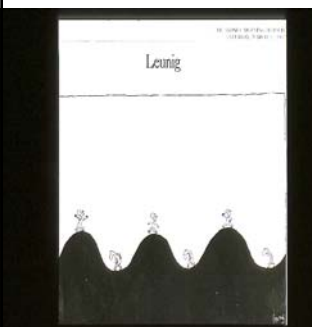
Key Issues in depression

- Daily experiences of stigma
- Negative attitudes of Health Professionals
- Lack of chronic and/or continuous care
- Lack of integrated medical and psychological care
- Poor access to non-pharmacological treatments

What do people with depression do?

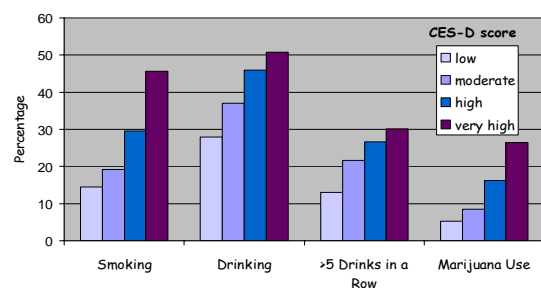
- Normal people say:
 - Get help, family and friends, go out more, exercise, non-drug treatments
- People with depression do: (Jorm et al. 1999):
 - 1. Alcohol
 - 2. Paracetamol
 - 9. See a Family Doctor
 - 27/29 Psychologist/psychiatrist

Depression: Life Course



- Early-onset with relapsing illness and strong familial (genetic) factors
 - 30% genetic
 - 60% current environment
- Late-onset:
 - underlying vascular and other medical factors
 - Different genetic factors (Gillespie et al 2004)

Smoking, Alcohol Use & Marijuana Use



Comorbid alcohol or substance abuse in primary care

- Over 10% of cases with comorbid alcohol or substance abuse and significant mental disorder
- Comorbid cases more marked disability
- Ongoing physical health and risk factors in young people – smoking, obesity, exercise, sexual health

Exposure to cannabis

- Current estimates:
 - 50-70% exposed in teenage years
- Australian survey:
 - 17 years old using at least weekly:
 - 11% of boys
 - 7% of girls

Cannabis causing psychosis (BMJ Nov 2002)

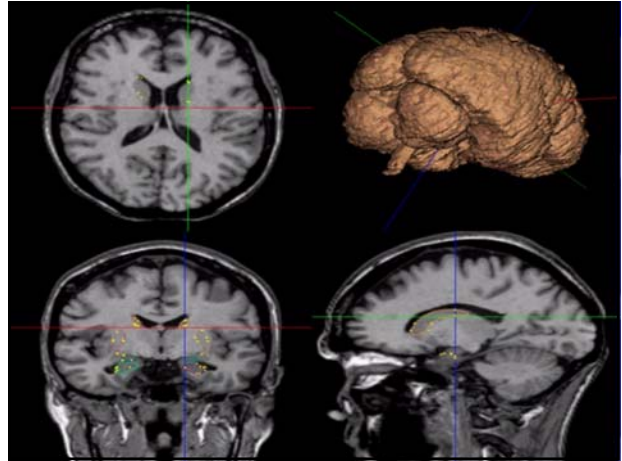
- Longitudinal population studies:
 - Swedish conscripts:
 - 50,000 followed over 17 years
 - OR 6.7x for heavy use
 - Overall 30%
 - Dose-response effect
 - Dutch and NZ cohorts confirm effect
 - NZ Study: exposure before 15 years increased risk 4 times

?cannabis cause depression

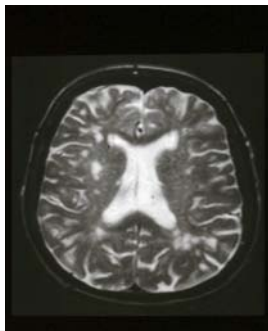
- Ongoing national and international debate
- Victorian longitudinal study of teenagers
 - (Patton et al. 2002, BMJ)
 - For girls: clear link between abuse of cannabis and NEW CASES of depression
 - Five times risk
 - Likely that similar effect for boys over time, but associated strongly with other substance abuse

Changing epidemiology of Depression

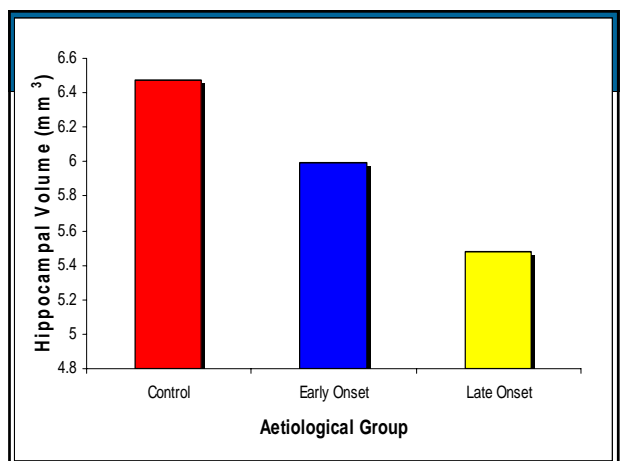
- Decreasing rates among older persons:
 - Major depression: 1 - 3 % (5 - 10% younger cohorts)
- Correlate of better physical health
 - Higher rates among:
 - Stroke (30%)
 - Earlier TIAs (15%) – Dubbo community
 - (Hickie et al 2002; ANZJP)
 - Vascular disease
 - Neurological Diseases such as Parkinson's disease and other subcortical disorders
 - Associated medical morbidity and cognitive impairment

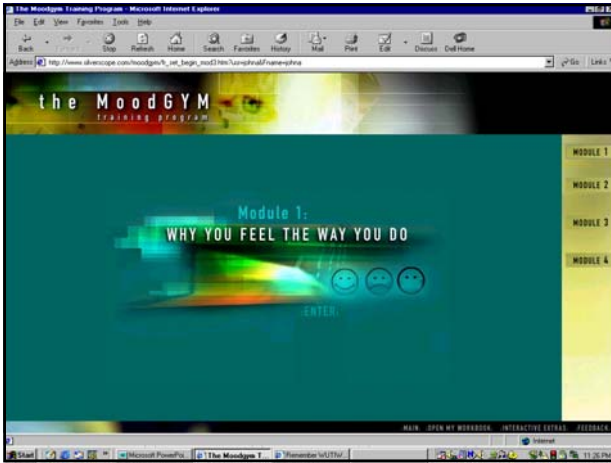


MRI in late-life depression



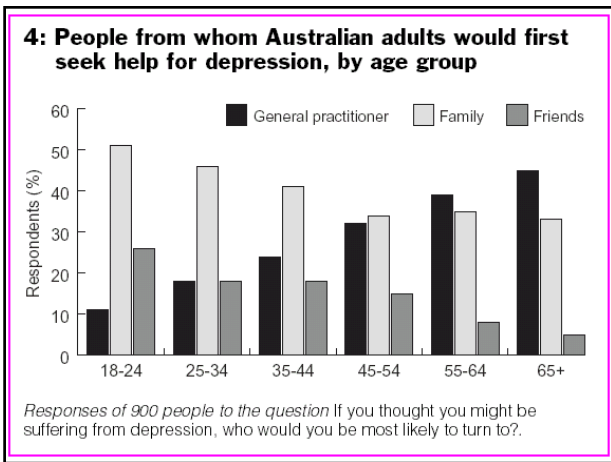
- Frontal lobe atrophy
- Severe deep white matter changes
- Periventricular changes
- Relationships to vascular risk factors
- Potential preventative factors





Evidence of Benefits

- Christensen et al. BMJ 2004
 - Clear benefits of e-health based quality informational and educational interventions
 - Community-based RCT:
 - High quality information
 - Moodgym
 - Standard information



Primary Care Uptake

- 5,000 GPs+ completed additional training
- 3,616 GPs (1034 in NSW) completed brief training course and registered for new services – Aug 2004
- 676 (205 in NSW) GPs providing specific psychological services by Aug 2004
- 80% of regions with additional psychological services by July 2004

Any Evidence of Outcomes?

- BMJ: Hall et al. 2003
 - Decreased suicide rates over last decade in proportion to increased antidepressant prescribing
 - That is, in those who access primary care and are treated by practitioners
 - Women and older persons receive the most benefit

What is to be Done?

- Real Investments
- Targeted Prevention
 - Reduction of Substance Abuse
 - Increased Psychoeducation
- Early intervention
 - Reduced time to first treatments
- Specific Interventions
 - Effective pharmacology
 - Effective Psychological therapies
 - Recovery Focus in first two years