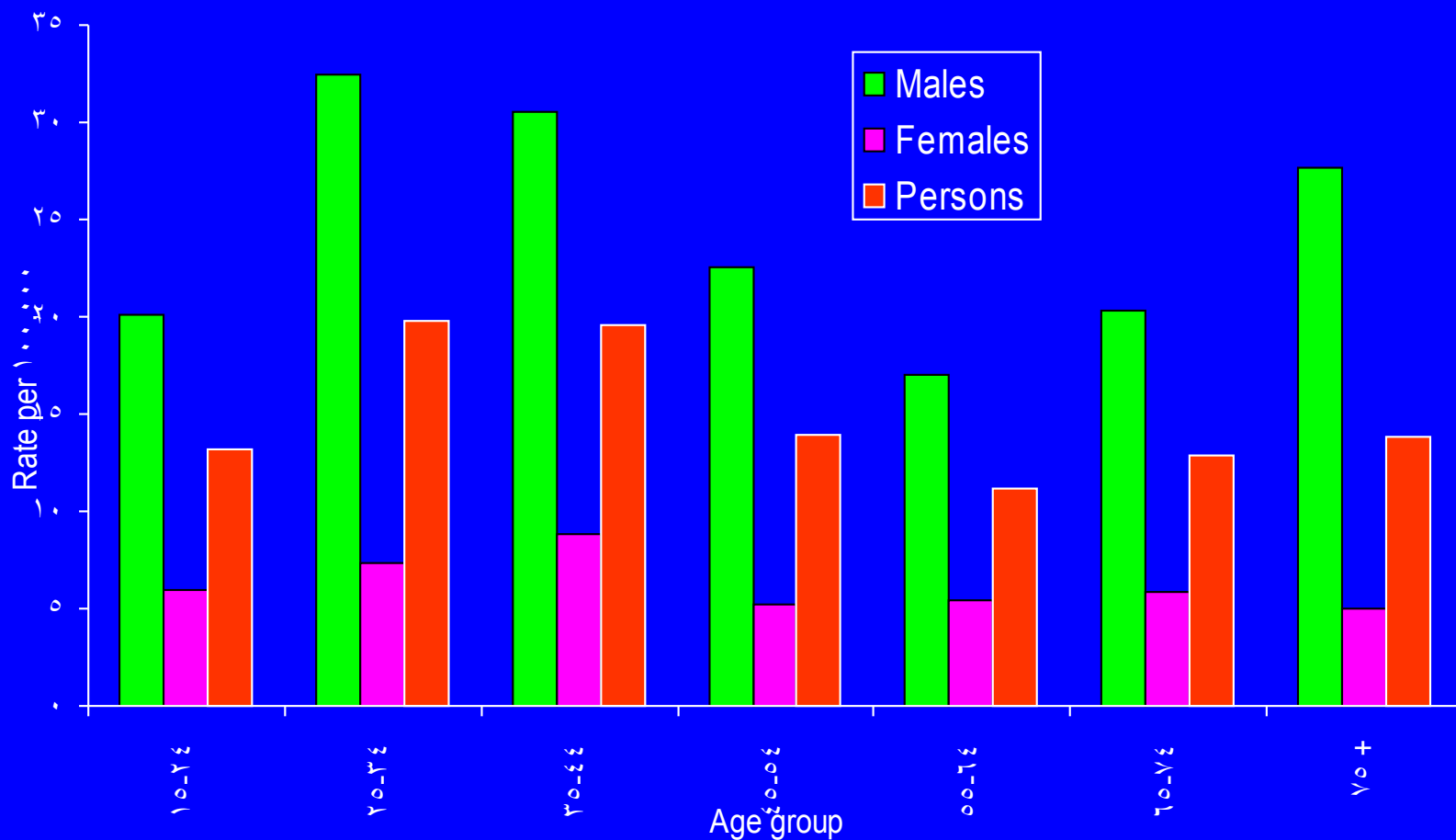


Suicide in the Elderly: Prevention from an Australian Context

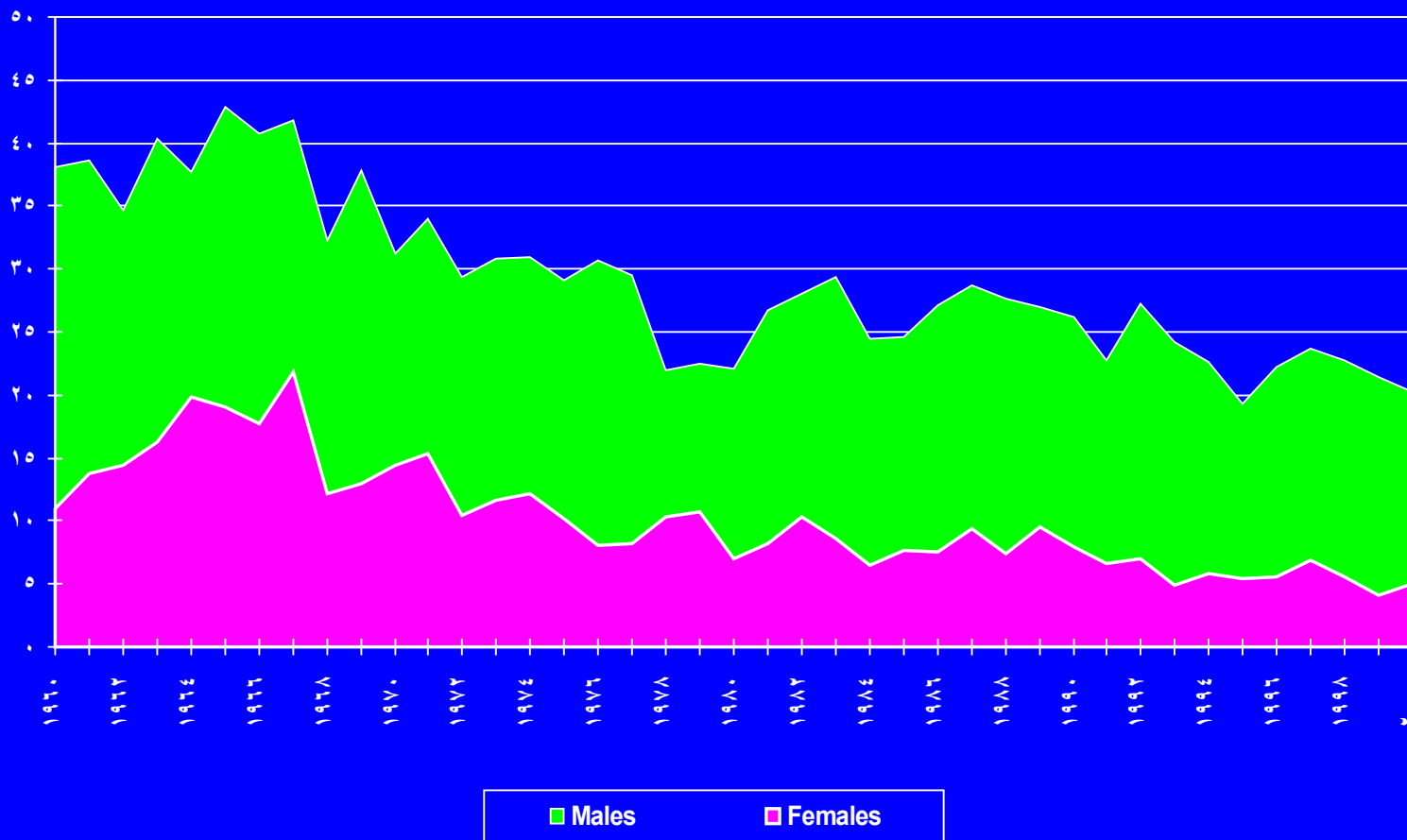
A/Prof Brian Draper MD
University of NSW
Sydney, Australia



SUICIDE ACROSS THE LIFE SPAN AUSTRALIA. Age specific rates, 2000.

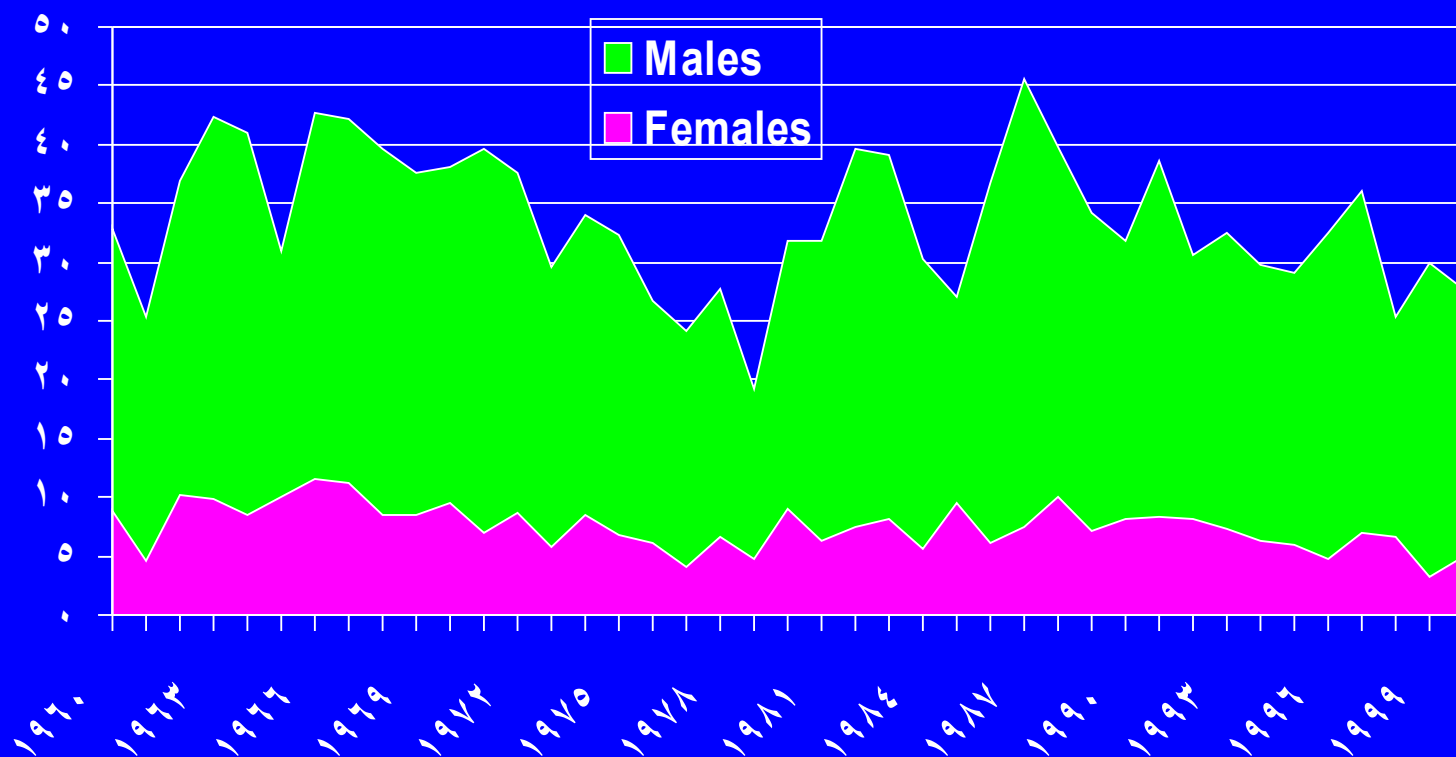


SUICIDE in OLDER PERSONS (65-74 Yrs) AUSTRALIA - 1960-2000



SOURCE: ABS (2001)

SUICIDE IN OLDER PERSONS >74 YEARS - AUSTRALIA, 1960-2000



Risk Factors for Suicide in Late Life – Mental Disorders

Combined data from 10 Psychological Autopsy studies (N = 533) Conwell et al (2002)

❖ Mood Disorders –	71%
❖ Major Depression – 50%	
❖ Other Depression – 21%	
❖ Other Psychoses –	4%
❖ Alcohol/Substance –	22%
❖ Any Mental Disorder –	86%

Risk Factors for Suicide in Late Life – Mental Disorders

Data from 5 controlled PA studies (Conwell et al, 2002)

❖ Increased Suicide Risk (all studies)

- Any Mental Disorder OR 27-113.1
- Any Mood Disorder OR 4-184.6
- Past Suicide Attempts OR 10.7-36.3

❖ Increased Suicide Risk (some studies)

- Alcohol/Substance Abuse - 3/5 studies
- Psychotic disorder - 1/5 studies
- Anxiety disorder -1/4 studies

Risk Factors for Suicide in Late Life – Physical Health

Data from controlled PA studies (Conwell et al, 2002)

- ❖ **Physical Illness Burden (2/2 studies)**
- ❖ **Current Serious Illness (3/4 studies)**
 - Cancer & CNS disorders most common
 - Uncontrolled pain implicated in ~20%
- ❖ **Functional impairment (3/3 studies)**

Risk Factors for Suicide in Late Life – Social Factors

Data from controlled PA studies (Conwell et al, 2002)

- ❖ **Living Alone**
 - Recently bereaved males
- ❖ **Low Social interaction**
- ❖ **Less Social support**
- ❖ **Financial Problems**
- ❖ **Relationship problems**
 - caregivers

Risk Factors for Suicide in Late Life – Other Putative Factors

❖ Neurobiological

- Low brain serotonin
- Grey & white matter brain changes

❖ Access to Means

❖ Personality

- Neuroticism
- Openness to Experience
- Hopelessness
- Aggression

Risk Factors for Suicide in Late Life – some Australian data

- ❖ Urban vs Rural - Rural settings have higher suicide rates in younger people and older people
- ❖ Migration – older migrants have higher suicide rates – especially from European countries

Motivations for Suicide

Snowdon & Baume (2002)

- ❖ Suicides aged 60 and over in Sydney
- ❖ Most were depressed – yet
 - 25% ‘loss-related’ depressions
 - 24% ‘understandable’
 - 18% - melancholic/psychotic depression
 - 13% responding to untenable situations
 - 10% depression associated with illness/disability
 - 10% ‘other’ e.g. psychosis, dementia, delirium,

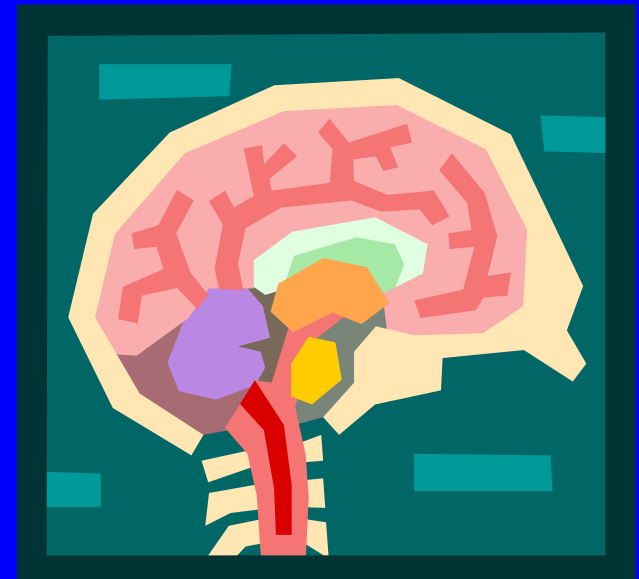
Risk Factors for Suicide in Late Life – Multivariate Analyses

Conwell et al (2002)

- ❖ The only consistent major risk factor is DEPRESSION**
- ❖ Other factors that are significant are family discord, low social network and being male**

Risk Factors for Depression in Late Life - Biological

- ✓ Genetic – mainly early onset
- ✓ Cerebrovascular Lesions - atheromatous and ischaemic changes in subcortical white matter seen on MRI scans (O'Brien et al, 1998; O'Brien et al, 2002)
- ❖ Elevated homocysteine increases risk for vascular disease (Reutens & Sachdev, 2002)



Risk Factors for Depression in Late Life – Physical Health

- ❖ Main risk factor for depression in old age
 - ❖ Increased risk with number of illnesses, illness severity & neurological disorders
- (Blazer et al 1991, Beekman et al 1997, Prince et al, 1997)

Risk Factors for Depression in Late Life

DISABILITY

- More important than illnesses (Prince et al, 1997)
- Chronic pain (Geerlings et al, 2002)
- Loss of independence
- Burden on family



Risk Factors for Depression in Late Life



- ✓ **Alcohol** –
Gazmarian et al,
2002)
- ✓ **Drugs** – 22
different drugs
implicated (Dhondt
et al, 2002)

Risk Factors for Depression in Late Life - Psychosocial



LIFE STRESSORS

- Death of spouse (Pakhala et al, 1991; Schoevers et al, 2000)
- Divorce (Pakhala et al, 1991)
- Recent losses e.g. pets_

Risk Factors for Depression in Late Life - Psychosocial



- Loneliness – increased risk of depression in next 3 years (Green et al 1992)
- Living alone (Livingston et al, 1990; Kennedy et al, 1990)
- Poor accommodation -OR 3.3 for depression (Stewart et al, 2002)

Suicide Protective Factors

- ❖ Strong social support & family connectedness
- ❖ Effective and accessible health care
- ❖ However, reason for decline in suicide rates over the last 30 years between ages 45-75 years is unknown

Better health? Better social services?

Public Health Model – Types of Preventive Interventions

- ❖ ***universal interventions*** - applied to entire populations and are not identified based on individual risk;
- ❖ ***selective interventions*** - applied to high risk asymptomatic or presymptomatic individuals;
- ❖ ***indicated interventions*** - applied to individuals with detectable symptoms and/or other proximal risk factors for depression.

Universal Suicide Prevention Strategies in Old Age

- ❖ Education of general public, clergy, media & health care providers about
 - normal ageing, ageism, stigma about mental illness, pain and disability management, end of life decisions, healthy lifestyles, depression and suicidal behaviours.

Universal Suicide Prevention Strategies in Later Life

- ❖ Encourage all older people to participate in social activities – volunteers, casual work, clubs.
- ❖ Provide better access to affordable transport for older people

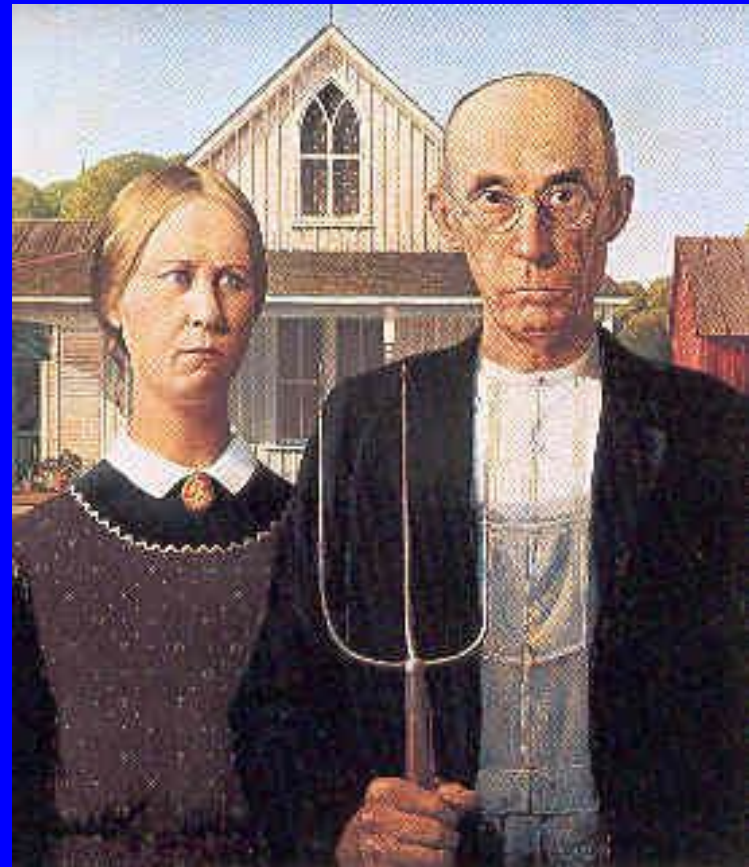
Universal Depression Prevention Strategies in Later Life

❖ Control of vascular risk factors

- Smoking
- Hypertension
- Physical exercise
- Lower cholesterol - low fat diet with grains and greens
- Folate/B¹² supplements

Selective Suicide Prevention Strategies in Old Age (1)

- ❖ Promote community programs (including religious) to contact and support isolated older people especially those in rural settings and migrants
- ❖ Provide support and counselling to elderly caregivers_



Selective Suicide Prevention Strategies in Old Age (2)



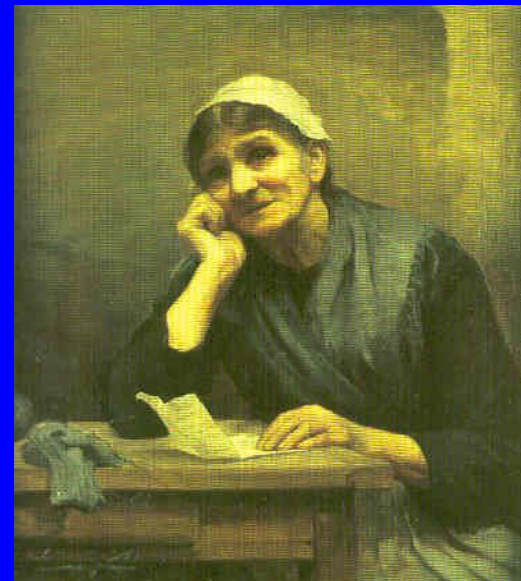
- - ❖ Educate asymptomatic older persons with a previous history of mood disorders (and their caregivers) about the early signs of depression relapse.
 - ❖ Focus medical and social services on reducing disability and enhancing independent functioning.

Selective Suicide Prevention Strategies in Old Age (3)

- ❖ Treat older people with chronic pain syndromes more effectively – palliative care services.
- ❖ Encourage recently bereaved males to receive bereavement counselling

Indicated Suicide Prevention Strategies in Old Age (1)

- ❖ Train gatekeepers (clergy, nurses, home care workers, emergency ward staff, police, migrant health etc) in recognition of symptomatic and at risk older people



Indicated Suicide Prevention Strategies in Old Age (2)

- ❖ Improve the screening and treatment of depression, anxiety and substance misuse in general practice, community health, hospitals and long term care.

Indicated Suicide Prevention Strategies in Old Age (3)

- ❖ Link outreach and gatekeeper services to adequate comprehensive aged care psychiatry services in a continuum of care.
- ❖ Implement strategies to provide more accessible, acceptable, and affordable mental health care to older people.

Draper & Low (2004)

**Preventing suicide: a
psychological autopsy study of
the last contact with a health
professional before suicide**

Brian Draper

John Snowdon

Diego De Leo

The Last Contact with a Health Professional

- ❖ Over 33% of elderly suicides have seen a GP in the week before death (Pearson et al, 1999)
- ❖ 66% have consulted a GP in the month before death (Andersen et al, 2000)

Is the last contact with a health professional a 'missed opportunity' for suicide prevention?

This is unclear as little is known about what happens. Previous research has relied upon GP notes, police records or brief interviews. Studies suggest 42 -70% of contacts were for psychosocial reasons and 30 - 58% for physical reasons

(van Casteren et al, 1993; Isometsa et al, 1995; Vassilas & Morgan, 1994; Obafunwa & Busuttil, 1994)

Communication of Suicidal Intent to Health Professional

- ❖ Occurs in 22-45% of last clinical contacts but only 11% of GP contacts (Obafunwa & Busuttil, 1994; Isometsa et al, 1995)_
- ❖ Males are less likely to communicate suicidal intent than females (Isometsa et al, 1995)
- ❖ Older victims are less likely to communicate than younger victims (Conwell et al, 1998)_

GP Recognition of depression in old age

- ❖ GPs and other physicians have difficulties in the identification, assessment and management of depression and suicide risk in old age (Shah & Harris, 1997)._

What is the evidence
that improved GP
recognition of
depression and suicide
risk might lead to
reduced suicide rates?

Gotland Study, Sweden

Rutz et al 1992

- 2-day depression education program that targeted all of the GPs on the island of Gotland.
- Better pattern of psychotropic prescribing, decreased inpatient care for depression, decreased suicide rates over the following 2-years
- Back to baseline within 3 years - 50% GP turnover

Community-based prevention for suicide in elderly by depression screening and follow-up in Japan (Oyama et al, 2004)

- ❖ 10 year quasi-experimental study in rural town of Joboji with two neighbouring control areas.
- ❖ Program involved depression screening, follow up with mental health care or psychiatric treatment and health education on depression.
- ❖ the relative risks estimated by the age-adjusted odds ratios for both males and females were reduced to almost one quarter more than a regional historical trend, with a better response to education for females than for males

Reducing suicidal ideation and depressive symptoms in depressed older primary care patients: a randomized controlled trial (Bruce et al (2004))

- ❖ RCT known as PROSPECT (Prevention of Suicide in Primary Care Elderly: Collaborative Trial) with patient recruitment from 20 primary care practices in the US. – patients aged 65+
- ❖ Screen positive depression cases managed with treatment guidelines tailored for elderly & compared with usual care
- ❖ at 4 months, in the intervention group, raw rates of suicidal ideation declined 12.9% points (29.4% to 16.5%) compared with 3.0% points (20.1% to 17.1% in usual
- ❖ Rates of suicidal ideation declined faster in intervention group, differences peaked at 8 months (71% vs 44%)
- ❖ Intervention patients had a more favorable course of depression in both degree and speed of symptom reduction; group differences peaked at 4 months.

Have antidepressants reduced suicide rates in Australia, 1991-2000?

- Decline in suicide rates in older age groups attributed to increased exposure to antidepressants (SSRIs) Hall et al, BMJ, 2003
- ignored the longer term trends where rate reduction had been greater in the decades before 1990
-but a 3.5-fold increase in use of antidepressants in Sweden has also been accompanied by a fall in suicide rate (Isacsson, 2000)_

Overall Strategy for Older People

- ❖ No single strategy likely to be successful alone
- ❖ A common understanding between stakeholders about the problem
- ❖ Removal of stigma and preconceptions about older people
- ❖ Community readiness and political will
- ❖ Funding

Conclusion

- ❖ Suicide Prevention Strategies for older Australians are required as they still have unacceptably high suicide rates