

# A Global Understanding of Best Practices in Geriatric Mental Health

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# Presentation Outline

- 1) Introduction: The Magnitude of the Problem
- 2) Measuring quality in geriatric mental health
- 3) Models of care
- 4) Review of the evidence of the effectiveness of geriatric mental health services – from prevention to long term care
- 5) Conclusion

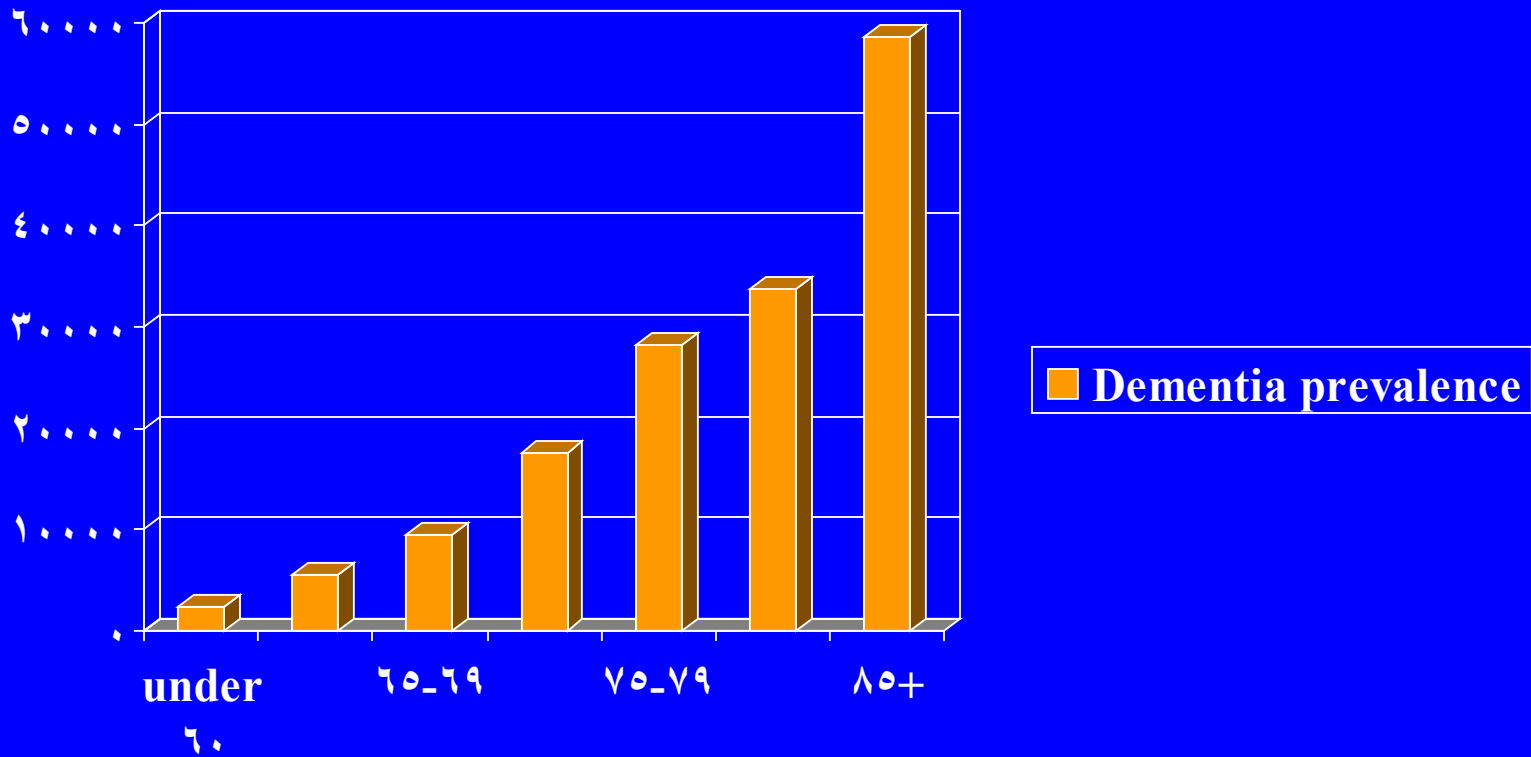
# What is Geriatric Mental Health?

- Also called 'psychogeriatrics', 'geriatric psychiatry', 'old age psychiatry', 'aged care psychiatry' or 'old age mental health'.
- It is the branch of health care that deals with the mental health of older people
- It includes depression, dementia, anxiety, psychoses, delirium and associated behavioural disturbances

# How common are mental disorders in the community in old age?

Depression	8-13%
Dementia	5% 65+ yrs 20% 80+ yrs
Anxiety	5-15%
Schizophrenia	1%
Alcohol Abuse	3-4% male, 1% female

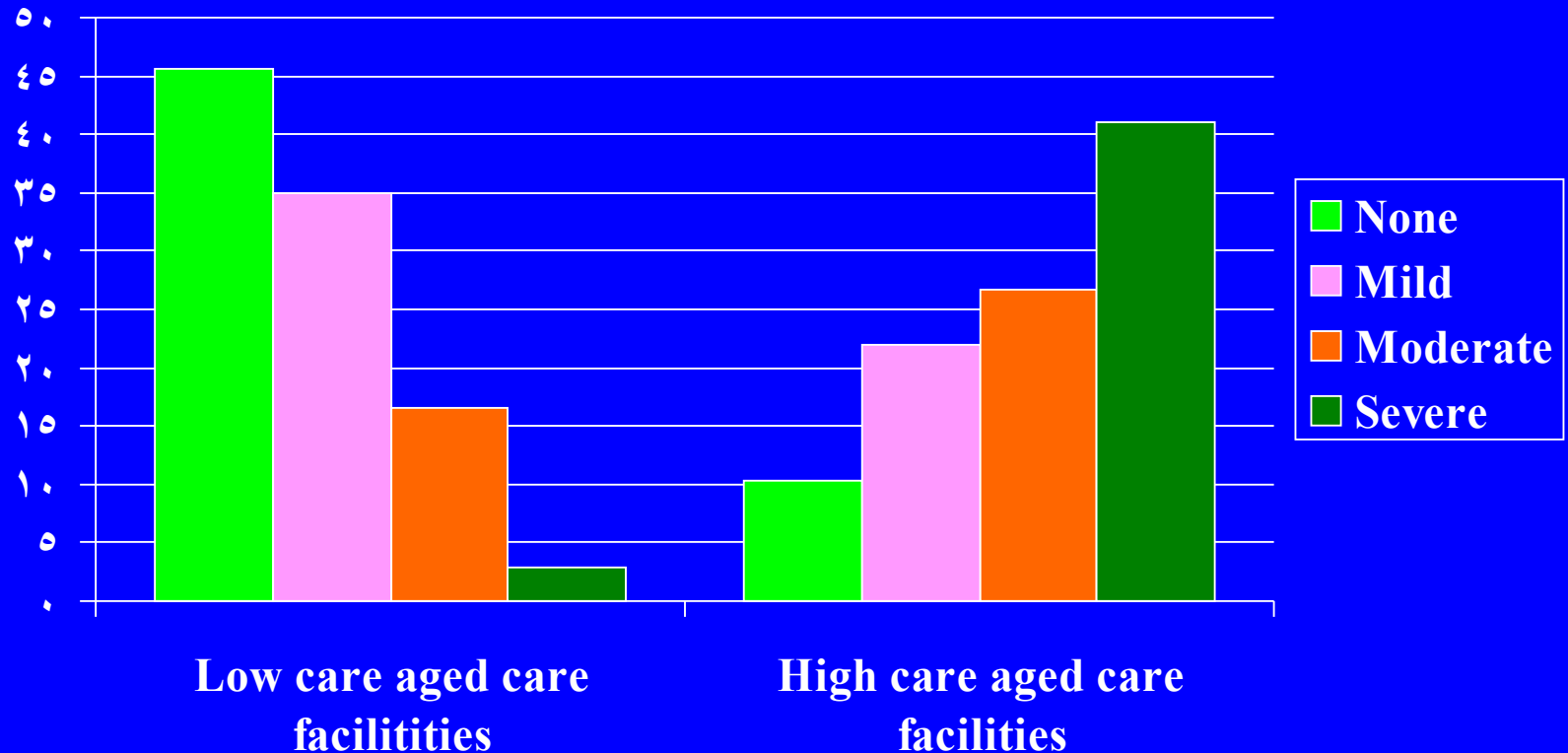
# Estimated Prevalence of Dementia in Australia in 2000



# Prevalence of depression in physically ill older people

- (a) General Hospital Wards  
23% - 45%
- (b) Medical Outpatients  
20% - 24%
- (c) Nursing Home Residents  
30% - 75% depressive symptoms  
20% depressive disorders

# Proportion of cognitively impaired in Australian residential care<sup>1</sup>



<sup>1</sup>Rosewarne, et al.1996

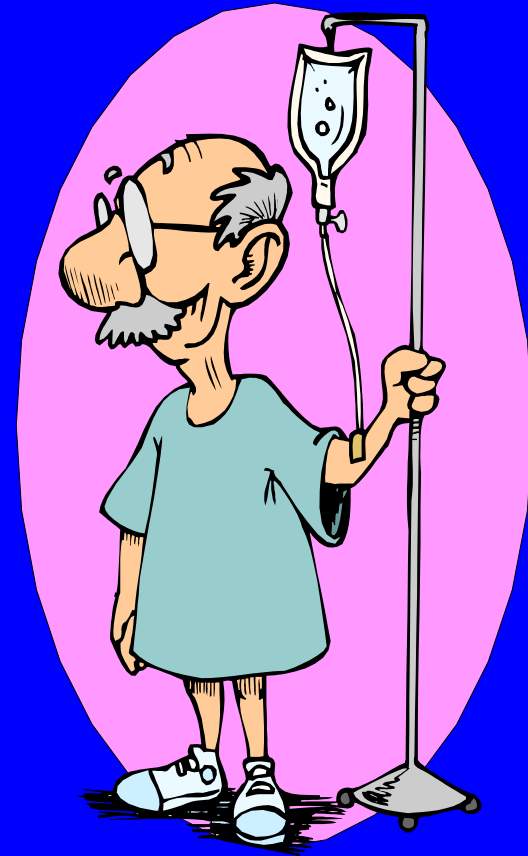
# Behavioural Disturbances in Eastern Sydney Nursing Home Residents

Brodaty, Draper et al, 2001

- o 80% nursing home residents were rated as having a behavioural disturbance on BEHAVE-AD

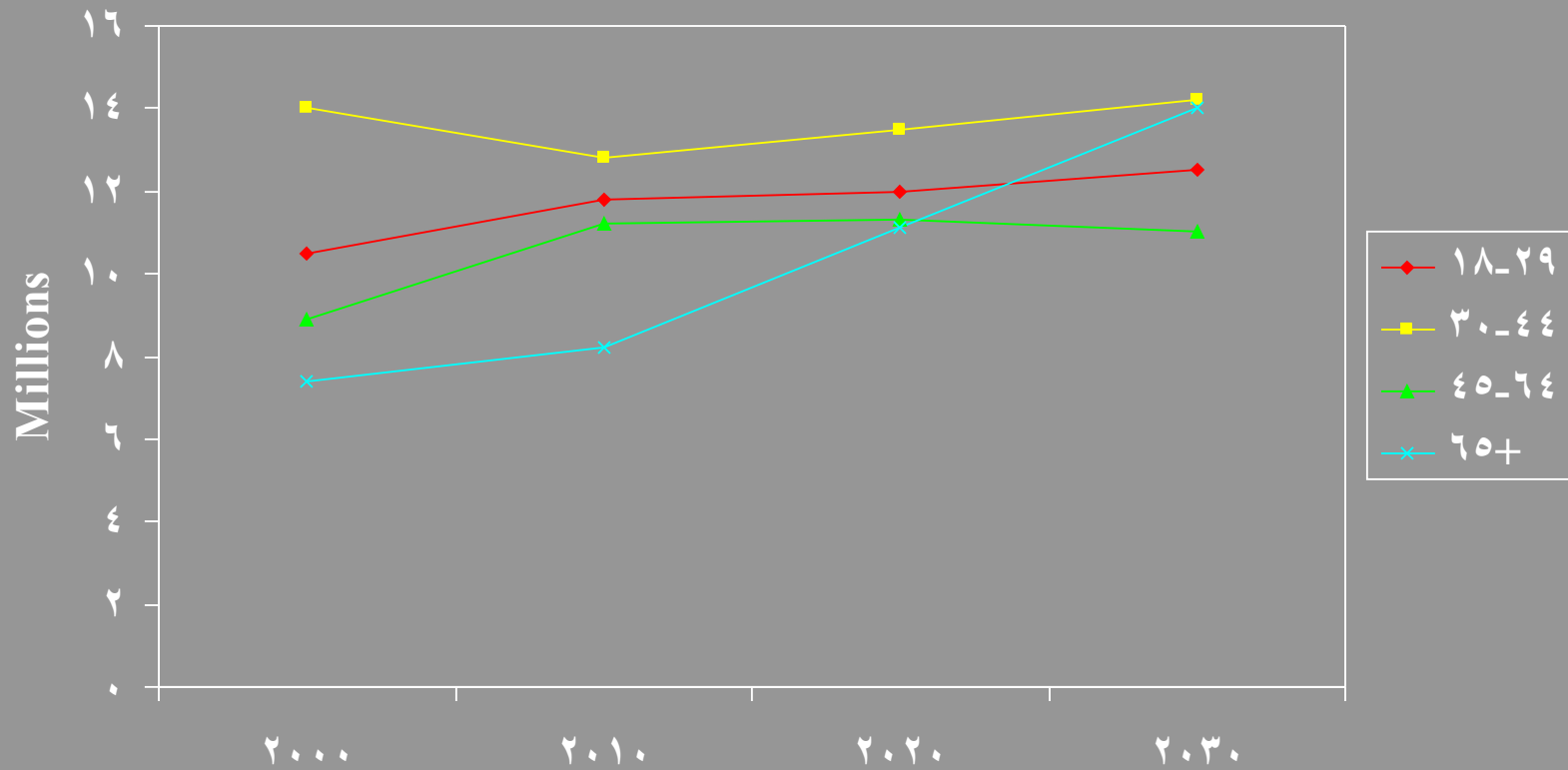
# Prevalence of Delirium

- Approximately 15% of elderly medical inpatients



# Estimated Prevalence of Major Psychiatric Disorders by age-group

Bartels 2003



# Some attributes of quality in health care (Donabedian, 1992)

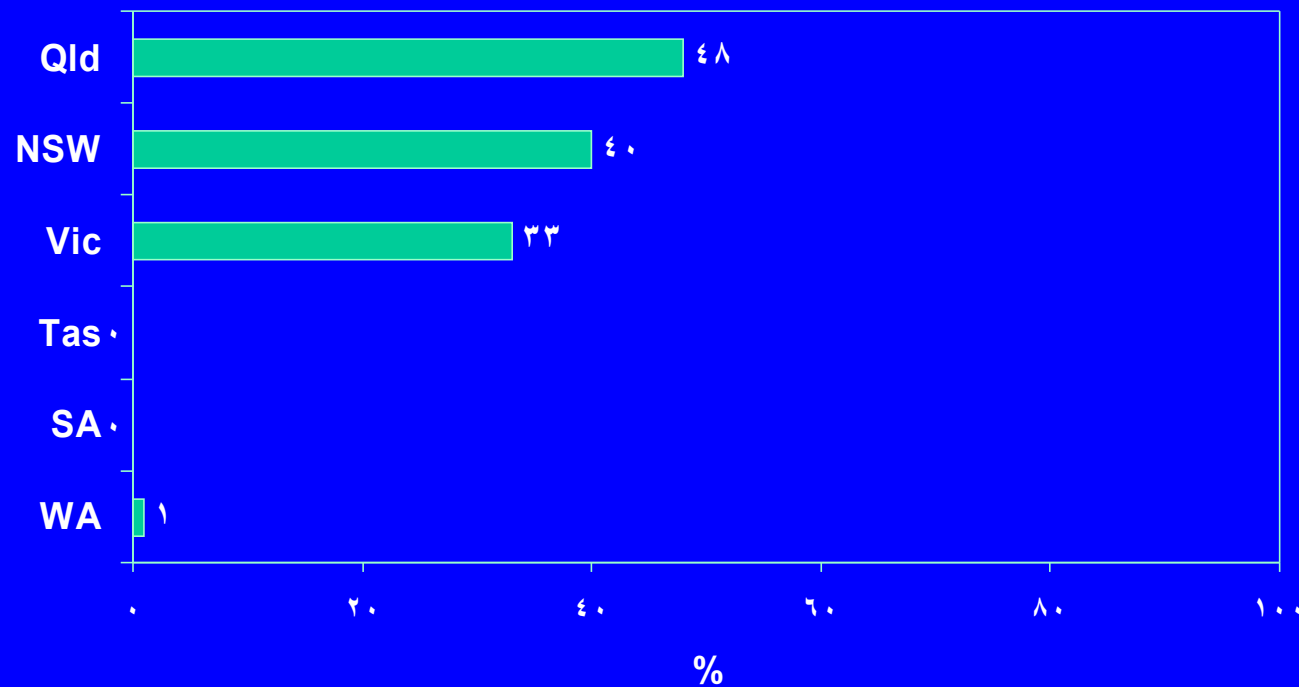
- **effectiveness** - the ability to attain the greatest improvements in health now achievable in best care;
- **efficiency** - the ability to lower the cost of care without diminishing attainable improvements in health;
- **optimality** - the balancing of costs against the effects of care on health (or on the benefit of health care, meaning the monetary value of improvements in health) so as to attain the most advantageous balance;
- **acceptability** - conformity with the wishes, desires and expectations of patients and responsible members of their families;
- **legitimacy** - conformity with social preferences as expressed in ethical principles, values, norms, laws and regulations; and
- **equity** - conformity with a principle that determines what is just or fair in the distribution of healthcare and of its benefits among the members of a population.

# Equity in Geriatric Mental Health Service Provision

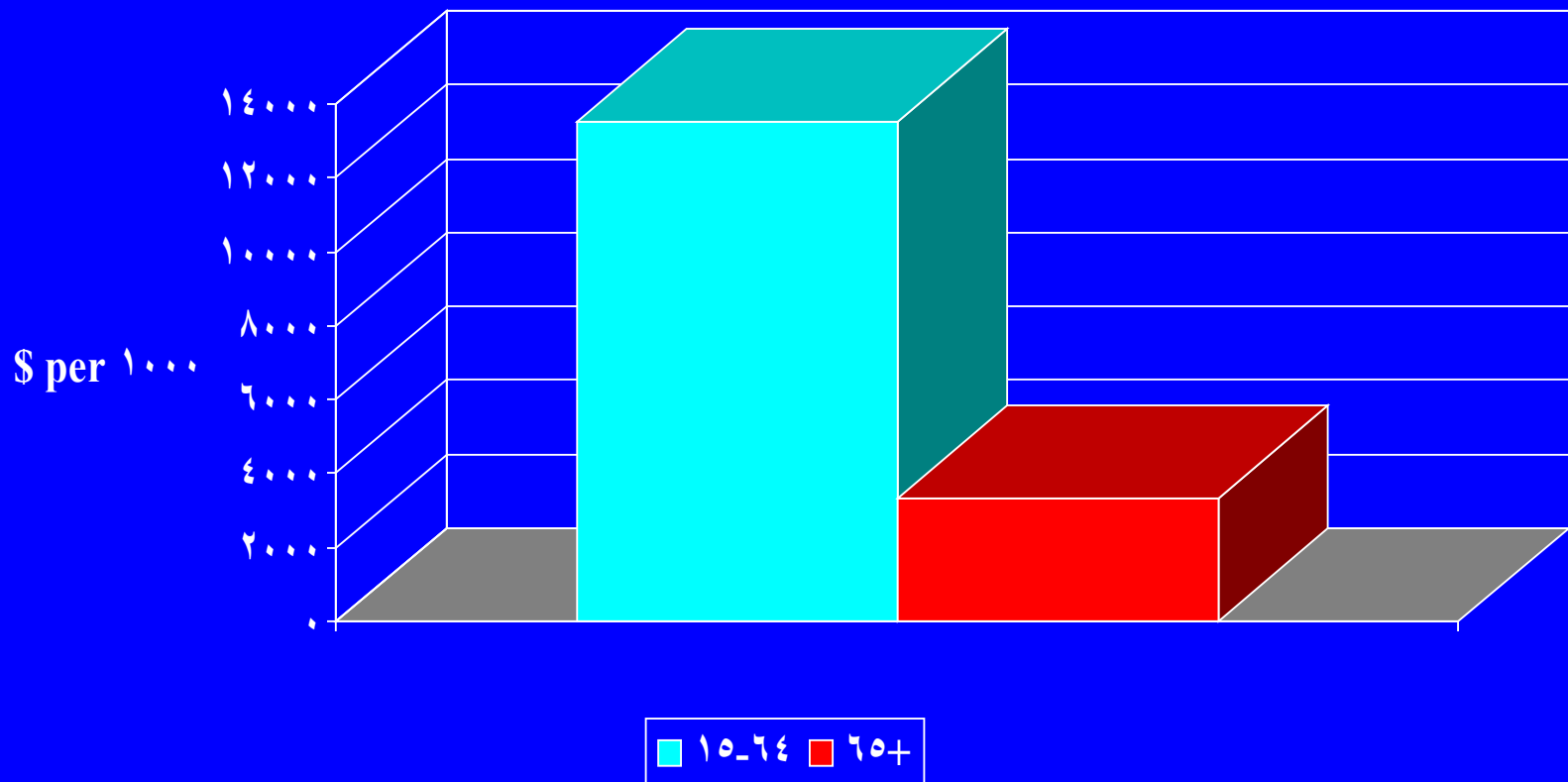
## Issues

- ❖ Regional Service Distribution
- ❖ Age distribution of resource allocation
- ❖ Service delivery to minority groups

# Regional equity – proportion of geriatric psychiatry beds in non-urban centres in Australia (O'Connor 2003)



# Per capita Medicare Psychiatric benefit by age, Australia, 1998 Draper & Koschera, 2001



# Unmet Needs Concerning Mental Disorders in Old Age

- The combined demands for a resolution of health problems by patients, their families, and their communities to which the health system has an effective response
- Effective interventions are those that have a predictable and significant positive effect and are acceptable

Evidence-based medicine is the  
use of contemporaneous  
appraised research findings as  
the basis for clinical decisions

# Designation of Levels of Evidence

Level I	Evidence obtained from a systematic review of all relevant randomised controlled trials.
Level II	Evidence obtained from at least one properly designed randomised controlled trial
Level III	Evidence obtained from non-randomised controlled trials
Level IV	Evidence obtained from case series

# How effective are interventions in geriatric mental health?

## Depression

- Antidepressants – Level I evidence even when comorbid with physical illness
- Cognitive Behaviour Therapy – Level I evidence
- Physical Exercise – Level II evidence
- ECT - Level III evidence

# How effective are interventions in geriatric mental health?

## Dementia

- Cognitive decline – Level 1 evidence of modest effect of cholinesterase inhibitors
- BPSD – Level 1 evidence of modest effect of antipsychotic drugs and some psychosocial interventions
- Carer Stress – Level 1 evidence of effectiveness of carer support/education programs to reduce stress and delay placement

# Translating effective interventions into practice

- Ensure adequate training of geriatric mental health staff
- Specialist geriatric mental health services vs general mental health services
- Use of clinical pathways – improves efficiency but effect on mental health outcomes unknown
- Use of best practice protocols – popular but unproven in geriatric mental health

# Models of Service Delivery

Johri et al (2003) – systematic review of 7 demonstration projects testing innovative models of care for elderly in OECD countries (USA, Canada, Italy, UK)

common features of effective systems included:

- Single entry point
- Case management
- Geriatric assessment & multidisciplinary team
- Use of financial incentives to encourage community care

# Public Health Model

Cole 2002

- Targets mental health of all older people in a defined population by systematic case identification, facilitation of access to treatment, delivery of quality care and assessment of outcomes.
- Has a strong health promotion and disease prevention focus

# Public Health Model – Types of 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.

# Seven-tiered model of management of behavioural and psychological symptoms of dementia (BPSD)

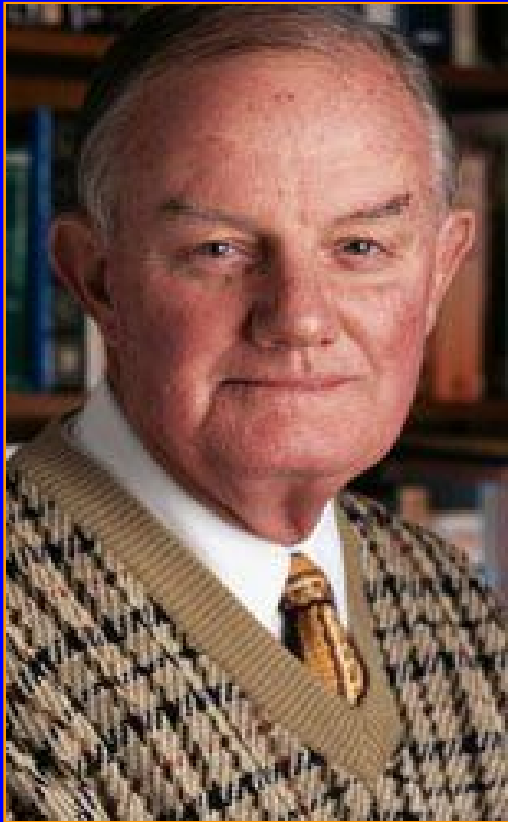
Brodaty et al, *MJA*,  
2003: 178:231-234



\* Prevalence is expressed as estimated percentage of people with dementia who currently fall into this category.

† Estimate based on clinical observations. ‡ Estimate based on Lyketsos et al.<sup>2</sup>

# Tier 1: No Mental Disorder



- The whole population without mental disorders
- *Management:* universal prevention for mental disorders
- No strategy proven

**Bruce Campbell, MBE**  
Senior Australian of the Year

# Risk Factors for Dementia and Depression

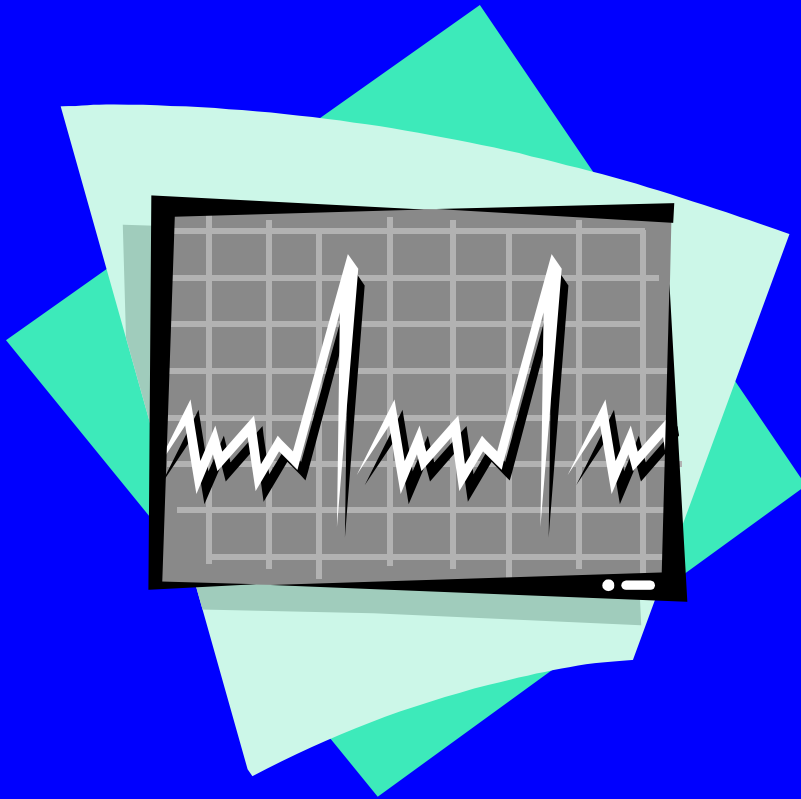
## DEMENTIA

- Age
- Sex
- Genetic Factors
- Education
- Vascular factors – cholesterol, homocysteine, hypertension, fats
- Physical inactivity
- Smoking
- Oxidative stress
- Head injury
- Alcohol
- Thyroid disease

## DEPRESSION

- Sex
- Genetic Factors
- Physical illness & disability
- Vascular Factors – cerebrovascular disease
- Physical inactivity
- Alcohol & drugs
- Social isolation
- Relationship problems
- Personality factors

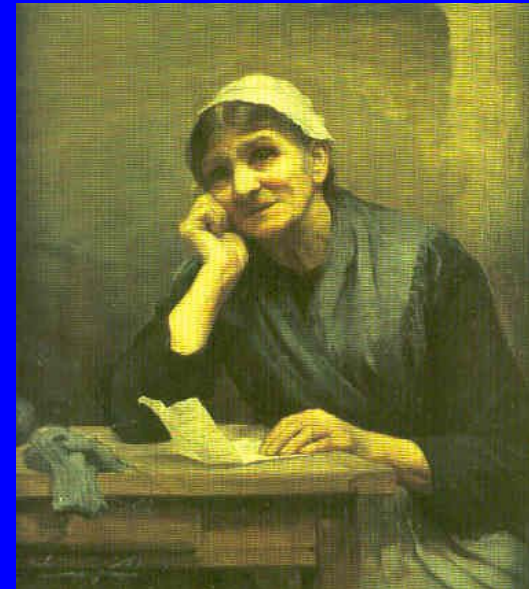
# Universal Prevention Strategies in Later Life



- Control of vascular risk factors
  - Smoking
  - Hypertension
  - Physical exercise
  - Lower cholesterol - low fat diet with grains and greens
  - Folate/B<sup>12</sup> supplements

# Mental Health Prevention Strategies in Later Life

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



# Universal Prevention Strategies in Later Life

Encourage older people to participate in social activities – volunteers, casual work, clubs.

Provide better access to affordable transport for older people



# Tiers 2 & 3: Mild Mental Disorders

## Mild or no BPSD

- sleep disturbance, wandering, apathy, repetitive questioning
- *Management* by primary health workers ± shared care
- *Strategies*
  - Education & support of primary care,
  - ?cholinesterase inhibitors
  - Education for family caregivers, especially on behavioural Mx techniques

## Minor Depression

- Often associated with physical disability, demoralisation, loneliness
- *Management* by primary health workers ± shared care
- *Strategies*
  - Education and support of primary health workers and older people
  - Psychosocial interventions – psychotherapy, physical and mental exercise, socialisation, counselling, music therapy, pleasant events,

# Primary Care Collaborations

Llewellyn-Jones *et al* (1999)

RCT 220 depressed self-care unit and hostel patients aged  $\geq 65$  living in residential care facilities

Intervention group received multidisciplinary consultation and collaboration, training of GP and carers on management of depression, health education and activity programmes

Control group received usual care

9.5 month FU - significant improvement on depression in intervention group compared to controls and higher use of antidepressants

# Tier 4: Moderate Mental Disorders

## Moderate BPSD

- depression, verbal abuse, psychosis, sexual disinhibition, wandering
- *Management* by specialist consultation and liaison with primary care
- *Strategies* - specialist consultation, tailored behavioural programs, pharmacotherapy, geriatric referral if necessary

## Moderate Depression

- Major depression, mixed anxiety/depressive disorders
- *Management* by specialist consultation and liaison with primary care
- *Strategies* - specialist consultation, psychosocial interventions e.g. community nurse support, antidepressant medication,

# Primary Care Collaborations

Unutzer et al (2000) (Quality 0.94)

Patients from 18 primary care clinics aged  $\geq 60$  with major depression and/or dysthymic disorder

Intervention group had 12 months access to a depression care manager offering support for primary care physician or brief psychotherapy for depression

Control group received usual care

Intervention group had greater rates of depression treatment, more satisfaction with depression care, lower depression severity, less functional impairment and greater quality of life than controls at 3, 6, 9, 12 months FU

# Primary Care Collaborations

Draper & Low (WHO Health Evidence Network, 2004)

- On the evidence hierarchy there is LEVEL II evidence that geriatric mental health services primary care collaborations are effective

# Tier 5: Severe Mental Disorders

## Severe BPSD

- depression, psychosis, screaming, severe agitation
- *Prevalence* in dementia, about 10%
- *Management* in dementia specific nursing homes or by specialist team case management
- *Strategies* include psychiatrist review and prescription, nurse liaison, psychologist specially tailored behavioural plan, social worker involving family

## Severe Depression

- Melancholic, psychotic depression, agoraphobia, social isolation and poor health
- *Management* in acute geriatric psychiatry units or by specialist community team case management
- *Strategies* include antidepressant medications, ECT, psychiatrist review, nurse liaison, psycho-social interventions, social worker involving family

# Geriatric Mental Health Outreach to Long Term Care

Rovner et al (1996)

- dementia care program consisting of activities, guidelines for psychotropic medications and educational rounds
- prevalence of behaviour disorders, use of antipsychotic medication and restraints were all reduced at 6 month follow-up.

# Geriatric Mental Health Outreach to Long Term Care

Brodaty, Draper et al (2003)

Compared the outcomes of:

- a psychogeriatric team approach
- a consultative general practice model
- standard care

for residents of nursing homes with dementia complicated by depression or psychosis

- Residents improved regardless of intervention
  - ?Hawthorn effect

# Geriatric Mental Health outreach to long-term care

Draper & Low (WHO Health Evidence Network, 2004)

On the evidence hierarchy there is

- Level II evidence that liaison-style geriatric mental health outreach services are effective;
- Level III evidence that consultation style geriatric mental health outreach services are effective

# Consultation or Liaison Service Style?

## CONSULTATION

- See patients upon request
- Advise on diagnostic and management issues
- Direct service provision mainly by primary care provider, some by specialist

## LIAISON

- Greater focus on education and support of primary care
- More emphasis upon supervision of primary care management
- See patients upon request

# Meta-analysis of Consultation and Liaison Service Styles

Draper & Green

- Consultation style studies were found to be ineffective with a effect size of -0.06
- Liaison style studies were effective with an effect size of 0.60

# Unresolved Questions

- What is the 'minimum effective dose' of geriatric mental health outreach to aged care facilities?
- Is the liaison style service delivery cost effective?
- What are the essential components of outreach services?



# Community Geriatric Mental Health Services - Depression

Banerjee et al (1996)

- RCT of the treatment of depression by psychogeriatric team in patients receiving home care.
- Individual care packages formulated by multidisciplinary team and implemented by researcher, control group treated by GP.
- Six month outcome
  - 58% intervention group recovered
  - 25% controls recovered (OR 9.0)

# Community Geriatric Mental Health Services

Draper & Low (WHO Health Evidence Network, 2004)

- On the evidence hierarchy there is Level I evidence that community geriatric mental health services are effective

# What are the key features that appear to increase effectiveness in community settings?

- Home-based initial assessment (to improve accessibility)
- Multidisciplinary teams, individualised treatment plans
- Case management approach
- Collaboration with GP case management that involves education and/or support of GP by service
- Involvement of patient/carer – lacks evidence but likely to be important

# Tiers 6 and 7 – Very Severe Mental Disorders in Old Age

Three groups that require institutional management due to the severity of the disorder

- II. Agitation/psychosis due to delirium
- III. Severe psychosis or depression with associated danger to self or others
- IV. Severe behavioural disturbance, usually aggression, associated with dementia, alcohol-related brain damage or head injury

# Group 1: Severe Agitation or Psychosis due to Delirium

- *Managed* in medical wards by geriatricians with input from geriatric mental health
- ?Role of 'Medical Psychogeriatric' wards – seems sensible but inadequate evaluation hinders development

# Consultation/Liaison to Medical wards

- Level II evidence that C/L services reduce LOS and costs, but mental health outcomes are not significantly better

# Group 2: Severe Depression or Psychosis



- Suicidal patients, self neglect, treatment resistance, comorbidities etc
- *Management* through acute hospitalisation

# Acute Hospital Care

Unlike Adult Mental Health (e.g. Houtt & Reynolds, 1984) and Geriatric Medicine (e.g. Caplan et al, 1999), there have been no RCTs comparing hospital based and community based care

Also.....

There are no RCTs comparing the treatment outcomes of older people in Acute Geriatric Psychiatry units and Acute General Psychiatry Units

# Older People in Acute Psychiatry Wards Draper & Low (WHO Health Evidence Network, 2004)

On the evidence hierarchy,

- acute geriatric psychiatry wards have Level III evidence for depression, Level IV for BPSD
- acute general psychiatry wards have Level IV evidence for depression, **no evidence** for BPSD

# What features of acute geriatric psychiatry wards increase effectiveness?

- There is a major gap in evidence
- Some suggestion that better effect with increased 'intensity' of admission – longer index admission, use of ECT, adequate pharmacotherapy – but weak evidence
- Linkage with community FU – better hospital/community integration

# Integrated Hospital and Community Care

Philpot et al (2000) (Quality 0.67)

Compared two neighbouring services over 5-8  
years

Depression readmissions less likely in the  
service with a community orientation, longer  
index admissions, and where community  
psychiatric FU arranged

# Integrated Hospital and Community Care

Draper & Low (WHO Health Evidence  
Network, 2004)

- On the evidence hierarchy there is Level II evidence that integrated hospital and community geriatric mental health care is effective

# Group 3: Severe BPSD

- Patients with **severe behavioural disturbance** such as dangerous physical aggression
- Estimate: need 7 beds /10,000 population 65+
- *Management* in special-care facilities  
e.g. psychogeriatric, aged-care, special care or neurobehavioural units

# Long Term Institutional Care

Draper & Low (WHO Health Evidence Network, 2004)

- Purpose built community based residential facilities have advantages over long stay psychogeriatric wards for less dependent patients with dementia and chronic schizophrenia (Level III evidence)

# Unresolved Questions

- Are there specific patient groups that are best suited in long term psychogeriatric wards as opposed to community residences e.g. violent patients, forensic patients?
- Is it best practice to have the most difficult long term patients managed in facilities run by psychogeriatric services?
- How do we determine best practice for these patient groups?

# Conclusion

Effective geriatric mental health services feature:

- ✓ Accessible, multidisciplinary, integrated, hospital/community teams that collaborate with primary care, other service providers and patients/carers with an educational & health promotion focus.
- ✓ A commitment to outcomes oriented evidence based practice.

# Thank You!

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