



Online Symposia 2021

Anxiety and Depression in Dementia Research (ADDResearch) Network Inaugural International Symposium

Friday 17th September 2021

10am – 12.30pm Australian Eastern Standard Time (AEST)



Australian Government
National Health and Medical Research Council

Anxiety and Depression in Dementia Research Network Inaugural International Symposium

Friday 17th Sept 2021: 10am – 12.30pm Australian Eastern Standard Time (AEST)

WELCOME & CHAIRS



Professor Henry Brodaty
DCRC, UNSW Sydney



Dr Nadeeka Dissanayaka
University of Queensland



Dr Claire Burley
DCRC, UNSW Sydney

Register for
FREE here:
<https://tinyurl.com/2vt3mfhj>

SPEAKERS & EXPERT PANEL



Prof Neil Page
Dementia Advocate



Gabriela Pacas Fronza
University of Queensland



Prof Viviana Wuthrich
Macquarie University



Dr Simone Reppermund
UNSW Sydney



Prof Nancy Pachana
University of
Queensland



Prof Sherry Beaudreau
VA Palo Alto Health Care
System/ Stanford
University, **USA**



Prof Sunil Bhar
Swinburne University
of Technology



Prof Roseanne Dobkin
Rutgers University,
USA

PROGRAM

Anxiety and Depression in Dementia (ADD) Research Network International Symposium

Friday 17th September, 10am – 12.30pm Australian Eastern Standard Time (AEST)

Time	Action
10:00am – 10:05am (5 mins)	Dr Nadeeka Dissanayaka Open the symposium
10:05am – 10:10am (5 mins)	Prof Henry Brodaty Co-Director, DCRC, Queensland University of Technology Welcome
10:10am-10:25am (15 mins)	Prof Neil Page Dementia Advocate: Involving people with lived experiences of dementia in ADDResearch
Session 1 10:25am – 10:55am	SESSION CHAIR: Dr Claire Burley (7 minutes per talk, each followed by 3 minutes Q&A)
10:25am – 10:35am (10 mins)	Presenter 1: Gabriela Pacas Fronza PhD Scholar, The University of Queensland Centre for Clinical Research, Faculty of Medicine Topic: Remote delivery of Technology assisted Cognitive Behavioural Therapy for People living with Dementia in the community
10:35am – 10:45am (10 mins)	Presenter 2: Prof Viviana Wuthrich Director of Centre for Ageing, Cognition and Wellbeing Department of Psychology, Centre for Emotional Health, Macquarie University Topic: Reducing dementia risk by tackling anxiety and depression
10:45am – 10:55am (10 mins)	Presenter 3: Dr Simone Reppermund Senior Lecturer, University of New South Wales



	Topic: Late-life depression and dementia –health profiles, health services use and transition to dementia
10:55am - 11.00am (5 mins)	BREAK
Session 2 11:00am – 12:00pm	SESSION CHAIR: Dr Nadeeka Dissanayaka
11:00am - 11:15am (15 mins)	Presenter 4: Prof Nancy Pachana Professor of Clinical Geropsychology, School of Psychology, The University of Queensland Topic: Detecting and Diagnosing Anxiety and Depression in Dementia
11:15am - 11:30am (15 mins)	Presenter 5: Prof Sherry Beaudreau Director (National), VA Advanced Fellowship Program in Mental Illness Research and Treatment Investigator, Sierra Pacific MIRECC, Palo Alto VA Clinical Professor (Affiliated), Psychiatry & Behavioral Sciences, Stanford University, USA Topic: Adapting the Mental Health Treatment of Anxiety and Depression for Older Adults with Cognitive Concerns
11:30am - 11:45am (15 mins)	Presenter 6: Prof Sunil Bhar Department of Psychological Sciences, Faculty of Health, Arts and Design, Swinburne University of Technology, Australia Topic: Cognitive behaviour therapy for depression and anxiety in dementia in aged care residents living in nursing homes in Australia: A cluster randomised trial
11:45am – 12:00pm (15 mins)	Presenter 7: Prof Roseanne Dobkin Professor of Psychiatry, Rutgers University Robert Wood Johnson Medical School, USA



	Topic: Non-pharmacologic and virtual treatment of depression in Parkinson's disease.
Expert Panel 12:00pm – 12:20pm (20 mins)	EXPERT PANEL DISCUSSION & AUDIENCE Q&A Moderators: Dr Nadeeka Dissanayaka/ Dr Claire Burley EXPERT PANEL: Prof Neil Page, Prof Sherry Beaudreau, Prof Sunil Bhar, Prof Roseanne Dobkin, Prof Viviana Wuthrich, Prof Nancy Pachana <i>'Where do we go next with ADDResearch?'</i>
12:20pm – 12:27pm (7 mins)	<i>Prof Henry Brodaty Summarises</i> Co-Director, University of New South Wales
12:27pm – 12:30pm (3 mins)	Dr Nadeeka Dissanayaka: Close

The DCRC Online Symposia are recorded for broad circulation and are available to view after the events here: <https://dementiaresearch.org.au/projects/changed-behaviours/>

Lived Experiences with Anxiety, Depression and Dementia

In support of a holistic approach to research

Neil Page

Engineer

Husband of Sue Page

Deep Brain Stimulation Support Group of Parkinson's Queensland

Volunteer, Dovetree Aged Care Facility - Wesley Mission

Member Consumer and Community Involvement Group, Dementia & Neuro Mental
Health Research Unit

E: npage2@bigpond.com

Sue's journey with Parkinson's Disease

One of many neuro-degenerative diseases

Timeline for neuro-psychiatric symptoms



Sue Page
1941-2021

Date	Events	Anxiety	Depression	Dementia
c1980			Episodic	
1997	PD diagnosis		Episodic	
2003	End DRT "honeymoon"		Episodic	
2010	DBS surgery for PD	Episodic	Regular	
2013	Major fall injury Home care starts	Episodic	Regular	Episodic
2017		Episodic	Regular	Episodic
2020	Major fall injury Residential care	Regular	Regular	Frequently Episodic
2021	Terminal fall injury	Regular	Regular	Frequently Episodic

Things that help

Without a cure it is all about quality of life

For those living with ADD *and* their care givers:

- **Whatever you wanted to do in life, do it now**
 - Mental and physical stimulation helps – do some fun things
- **Join a support group**
 - Distancing of old friends – reach out to those on the same journey
- **Write a journal**
 - Therapeutic and invaluable for consultations with doctors and researchers
- **Seek permission to record medical consultations**
 - Hard to remember details of short infrequent meetings – share with family
- **Accept help**
 - From anyone who offers – Team Sue
- **Prepare yourself for the possibility of residential care**

Things that help

Without a cure it is all about quality of life

For researchers:

- **Recognise the holistic nature of the disease**
 - What you are interested in is likely to be a small part of a very complex illness
 - Be aware of all the symptoms – interactions with and between neuro-psychiatric
 - Do some volunteering in an aged care facility
- **ADD often presents at the advanced stages of PD**
 - Keep sessions short and during alert periods
- **Involve the care-giver**
 - Those with ADD sometimes in denial. Care-givers often notice more things

Things that help

Without a cure it is all about quality of life

For doctors, clinicians:

- **Be accessible**
 - Unexpected events add greatly to anxiety – set up help desk
- **Try to include the care-giver in consultations**
 - They can be 24/7 observers
- **Encourage the care-giver in particular to keep and bring a journal to the consultations**
- **Encourage (or provide) recordings of consultations**
- **Be prepared to talk about the future**
 - Prognosis is difficult, but knowledge allows transition from reactive to proactive care
- **Look after the care-giver. They are on the job 168 hours in the week.**

I hope I have been able to show a little of what those with *lived experience* can contribute to the contextual understanding, scoping and focus of research into Anxiety, Depression and Dementia

THANK YOU FOR WATCHING AND LISTENING

Cognitive behaviour therapy for depression and anxiety in dementia in aged care residents in Australia: A cluster randomised trial

Blending technology with person centred care to enrich quality of life of older adults with dementia who live in residential care

Prof Sunil Bhar, sbhar@swin.edu.au, DCRC September 2021

Collaborators: Mark Silver, Rebecca Collins, Deborah Koder, Jahar Bhowmik & Raaj Biswas

Mental health of older adults with dementia who live in nursing homes

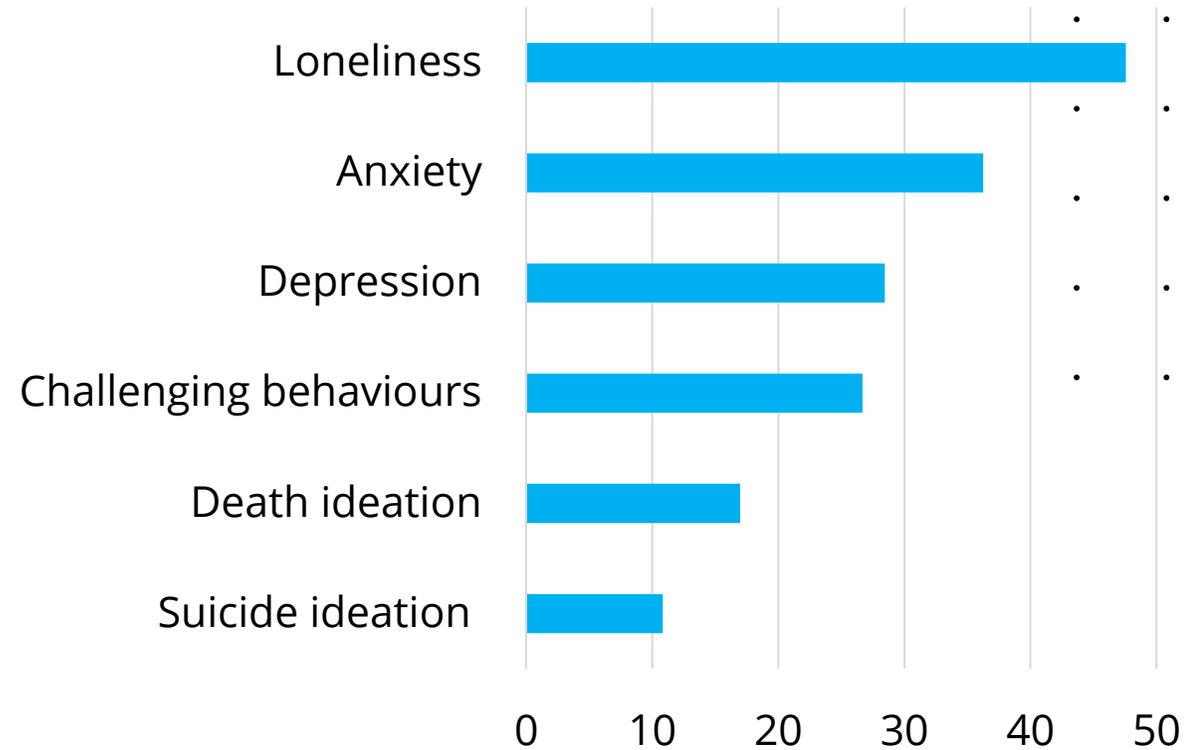
- There are approximately 335 889 aged care residents, in Australia, of whom 52% are diagnosed with dementia
- Of these residents with dementia, approximately 50% (90,000 residents) have significant levels of depression or anxiety
- Very little evidence for the effectiveness of psychological treatments for depression and anxiety in aged care residents with dementia
- Access to support is very poor; residential staff and clinicians experience barriers in managing such symptoms, resulting in an over reliance on medication

Swinburne Wellbeing Clinic for Older Adults

<https://www.swinburne.edu.au/research/centres-groups-clinics/wellbeing-clinic/>

Established in 2011

- Psychological services for aged care residents
- Training for trainee psychologists, social workers and counsellors
- Education services for aged care staff
- Family support
- Volunteering and digital stories
- Research
- National telehealth counselling and support service



Mental health profile of residents, in response to COVID-19
(Brydon et al, 2020 preliminary data on 121 facilities)

The Dementia in Aged Care Study (DACCS)

- Funded by the Australian Government Department of Health under the Dementia and Aged Care Services Fund
- Conducted by Swinburne University of Technology, in collaboration with Dementia Australia and Residential Aged Care Networks
- To examine if cognitive behaviour therapy (CBT) was associated with significantly greater improvement in depression, anxiety and quality of life for aged care residents with mild to moderate dementia, compared with usual care



The Dementia in Aged Care Study (DACCS)

Design

- Cluster randomised controlled trial, involving 21 residential aged care facilities in Greater Melbourne
- Residents were referred by staff to the trial. Residents were eligible if they were 65+, had a diagnosis of dementia, had mild to moderate cognitive impairment (PAS-CI 4-15), and had significant levels of depression (CSDD 7+) or anxiety (RAID 11+)



The Dementia in Aged Care Study (DACCS)

Participants (N = 133)

Demographic	Mean
Age	Mean 85.6 (SD = 8.4), range 65-100
Gender	Female 66%
Country of birth	Australia 74%
Language at home	English 90%
Education	Did not finish high school 55%, completed university, 19%
Montreal Cognitive Assessment	12.92 (6.16), range 1 – 27 (2 in the 26+ normal range)

The Dementia in Aged Care Study (DACCS)

Assessments at baseline, 6 months and 9 months

Outcomes	Measures	Items	Example items	Perspectives
Depressive symptoms	Cornell scale for depression in dementia (CSDD)	19	“Have you been feeling down or sad this past week? Over the past week, were you able to enjoy pleasant events fully? In the past week, have you felt less interested in what you usually like to do?”	Resident Staff Research assistants
Anxiety symptoms	Rating Anxiety in Dementia (RAID)	18	“Have you been feeling frightened or anxious this past week? Have you been jumpy or easily startled this past week? Have you experienced trembling in the past week?”	Resident Staff Research assistants
Quality of life	Quality of Life – Alzheimer’s Disease (QOL-AD)	15	“When you think of your life overall, everything together, how do you feel about your life? How do you feel about your relationship with people who work here? How do you feel about your physical health?”	Resident Staff

The Dementia in Aged Care Study (DACCS)

Treatment

- Facilities were randomised to treatment (11 facilities) or no-treatment (10 facilities)
- Treatment involved individual sessions with residents and education/support activities with staff and families



The Dementia in Aged Care Study (DACCS)

Individual sessions with residents

- Twenty sessions of CBT, over approximately 6 months
- Therapists was a postgraduate students (psychology, social work, counselling) under supervision
- Involved anxiety management, behavioural activation, cognitive restructuring and reminiscence
- Augmented by a systemic approach, concrete strategies, reminiscence, ambiguity tolerance and memory aids



The Dementia in Aged Care Study (DACCS)

Education/support with family and staff

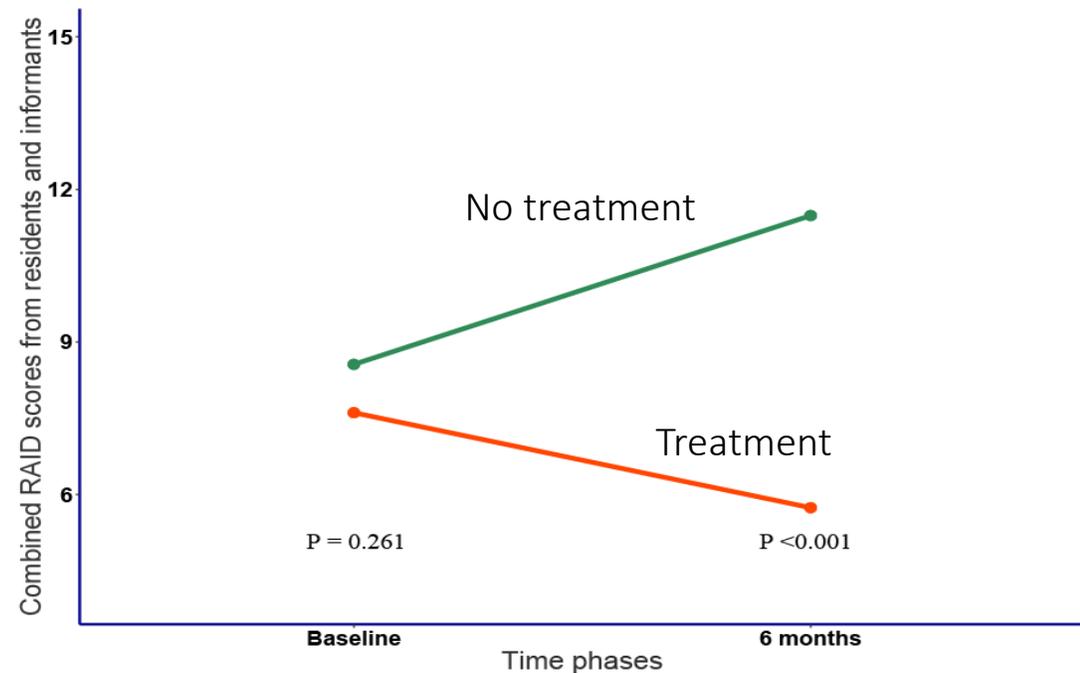
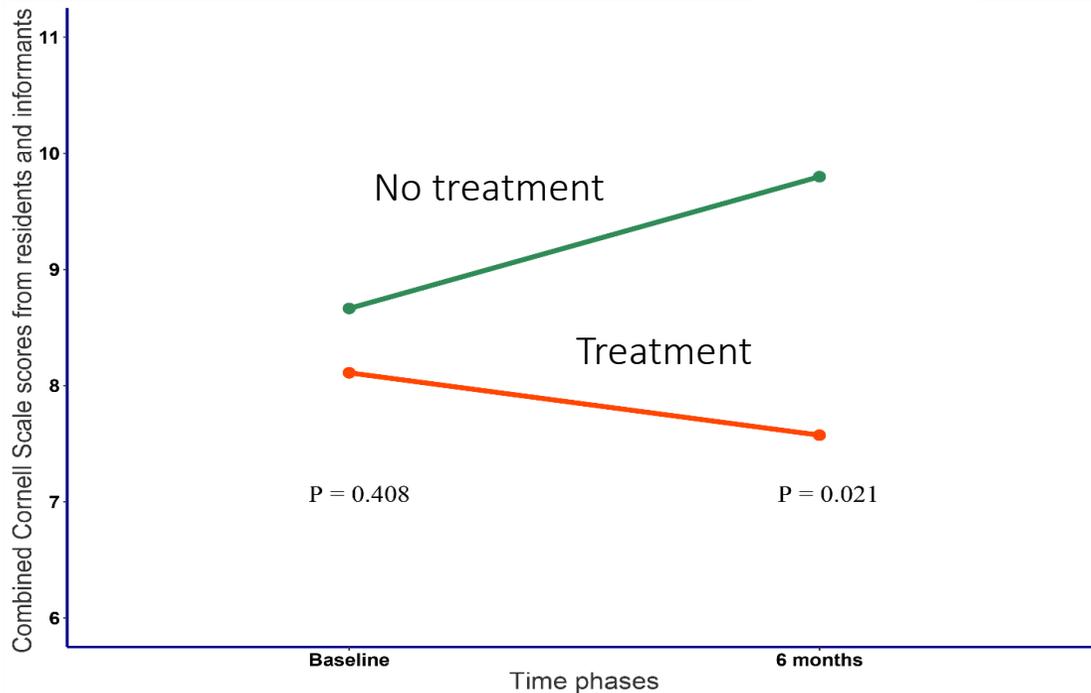
- Virtual reality training program – Educational Immersive Dementia Experience (EDIE)
- Monthly family support groups
- Monthly staff consultation meetings



<https://www.dementia.org.au/learning/centre-for-dementia-learning/edie-educational-dementia-immersive-experience>

The Dementia in Aged Care Study (DACCS)

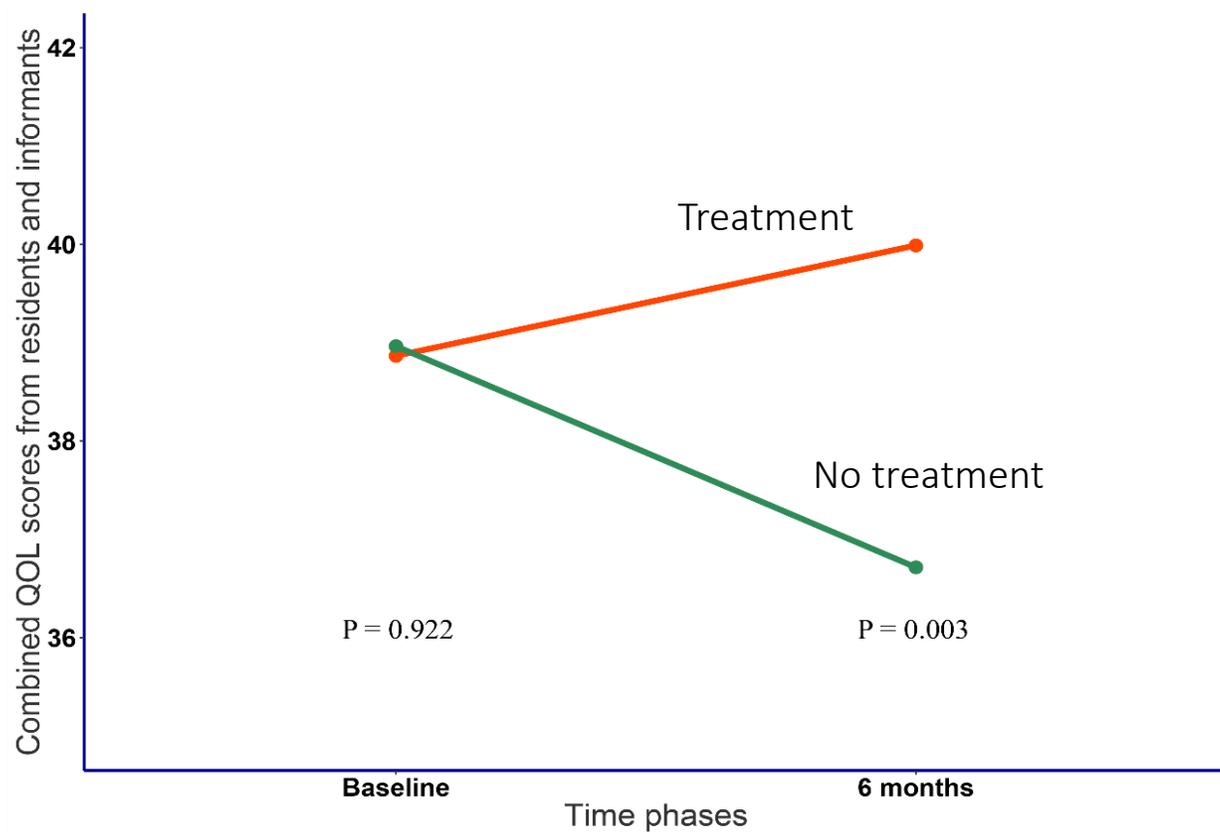
Results: Depression and anxiety



Sunil Bhar et al (in preparation). Cognitive behavioural therapy for reducing depression and anxiety in older adults with dementia who are living in residential aged care homes: A clustered randomised controlled trial. Funded by the Dementia Aged Care Services Fund (Grant activity ID 4-4Z4CMPS)

The Dementia in Aged Care Study (DACCS)

Results: Quality of life



The Dementia in Aged Care Study (DACCS)

Case illustration

- Eleanor, 81 year old woman diagnosed with Alzheimer's disease five years ago; rapid forgetting and reduced verbal fluency
- Loneliness ("others are too busy to visit"); forgot visits. Frustrated at the lack of physical activities within the facility
- Eleanor sent paintings to her friends interstate. Son assisted. Whiteboard in room as reminder of visitors. Eleanor encouraged to join facilities activities
- Eleanor reported feeling happier and more settled, echoed by family and staff

The Dementia in Aged Care Study (DACCS)

What can staff do to help reduce depression and anxiety

- Part of a team: Families, staff, resident, counsellors
- Reminisce together with the resident (and family member)
- Facilitate activities that are meaningful for the resident
- Promote anxiety management strategies
- Remind the resident to use coping statements and thinking skills
- Develop and use wellness plan in ongoing care

Resources

What other resources are there to support you and residents?

- National telehealth counselling and support service www.swin.edu.au/telehealthcounselling
- Carers Gateway (for families) -tel:1800422737 www.carergateway.gov.au
- Carers Victoria – 1800 541 845 www.carersvic.org.au
- Primary health networks (government funded) <https://www.health.gov.au/initiatives-and-programs/phn>
- Private mental health practitioners (Medicare funded)
- Community Visitors Scheme <https://www.health.gov.au/initiatives-and-programs/community-visitors-scheme-cvs>
- Australian Centre for Grief and Bereavement – 9265 2100 <https://www.grief.org.au/>
- Dementia Support Australia and Dementia Australia 1800 100 500 www.dementia.org.au

National telehealth counselling and support service for residential aged care

- Open to any aged care resident living in Australia - as well as to families and aged care staff
- Free – phone or video calls
- swin.edu.au/telehealthcounselling



Thank you





MACQUARIE
University

Reducing risk for dementia by tackling depression in primary care

VIVIANA WUTHRICH
CENTRE FOR AGEING, COGNITION & WELLBEING



Centre for Ageing, Cognition & Wellbeing

[HTTPS://WWW.MQ.EDU.AU/RESEARCH/CACW](https://www.mq.edu.au/research/cacw)



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Centre for Ageing, Cognition, and Wellbeing

Collaborating to explore normal and abnormal aspects of ageing

The Centre for Ageing, Cognition, and Wellbeing in the Faculty of Medicine, Health and Human Sciences at Macquarie University is a collaborative group of multidisciplinary researchers with interest in the normal and abnormal aspects of ageing. This includes research related to understanding and improving wellbeing related to neurodegenerative diseases, mental disorders, and health related conditions in the community and residential aged care. In addition, we are interested in understanding the normal impacts of ageing on cognition, reading, emotion regulation, social connections and workforce participation (retirement). We are also interested in studying how cognitive support systems (e.g. engaging in skilled activities with others) may benefit older adults. We have close connections with researchers

**Managing COVID19
Distress- Resources
and Updates Click
here**

CONTACT US

Level 7
4 First Walk
Macquarie University
NSW 2109

Ph: +61 2 9850 4866
(Dr Viviana Wuthrich)

Livingston et al.'s (2020). The Lancet Commission

	Relative risk for dementia (95% CI)	Risk factor prevalence	Communality	Unweighted PAF	Weighted PAF*
Early life (<45 years)					
Less education	1.6 (1.3-2.0)	40.0%	61.2%	19.4%	7.1%
Midlife (age 45-65 years)					
Hearing loss	1.9 (1.4-2.7)	31.7%	45.6%	22.2%	8.2%
Traumatic brain injury	1.8 (1.5-2.2)	12.1%	55.2%	9.2%	3.4%
Hypertension	1.6 (1.2-2.2)	8.9%	68.3%	5.1%	1.9%
Alcohol (>21 units/week)	1.2 (1.1-1.3)	11.8%	73.3%	2.1%	0.8%
Obesity (body-mass index ≥ 30)	1.6 (1.3-1.9)	3.4%	58.5%	2.0%	0.7%
Later life (age >65 years)					
Smoking	1.6 (1.2-2.2)	27.4%	62.3%	14.1%	5.2%
Depression	1.9 (1.6-2.3)	13.2%	69.8%	10.6%	3.9%
Social isolation	1.6 (1.3-1.9)	11.0%	28.1%	4.2%	3.5%
Physical inactivity	1.4 (1.2-1.7)	17.7%	55.2%	9.6%	1.6%
Diabetes	1.5 (1.3-1.8)	6.4%	71.4%	3.1%	1.1%
Air pollution	1.1 (1.1-1.1)	75.0%	13.3%	6.3%	2.3%

Data are relative risk (95% CI) or %. Overall weighted PAF=39.7%. PAF=population attributable fraction. *Weighted PAF is the relative contribution of each risk factor to the overall PAF when adjusted for communality.

Table 1: PAF for 12 dementia risk factors

Direct Effects

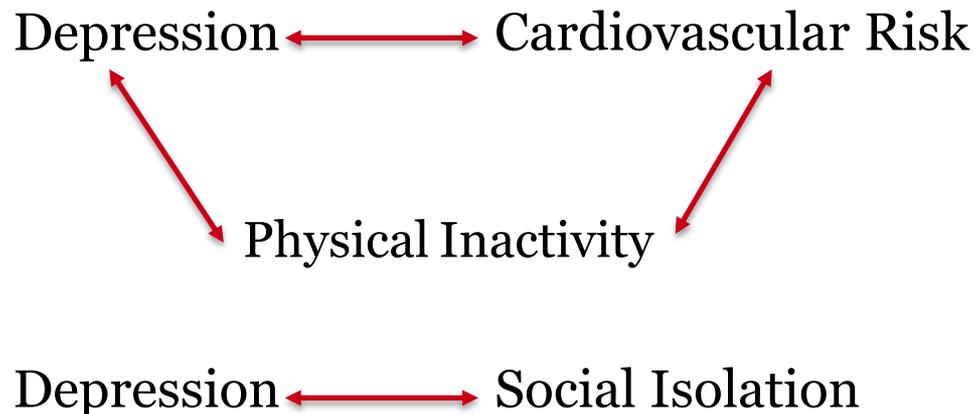
- Anxiety and depression are common
 - 1 in 20 Australians aged 65 years and over met criteria for depression and/or an anxiety disorder in the past year (Sunderland et al. 2015)
 - comorbid across lifespan, up to 50% with a mood disorder have a concurrent anxiety disorder (Beekman et al. 2000)
- Mechanisms are unclear
 - Depression - bidirectional risk with cardiovascular disease
 - Depression associated with a range of neurobiological brain changes including hippocampal loss, dysfunction of the hypothalamic–pituitary–adrenal axis (Naismith et al., 2012)
- Anxiety not established in systematic review (mixed evidence)
 - chronic anxiety might result in cortisol-mediated hippocampal neurotoxicity (Dar-Nimrod et al, 2012; Mah et al., 2015)

Indirect Effects

- Depression & anxiety associated with:
 - poorer physical health – less physical activity?
 - increased benzodiazepine use (increased risk for cognitive decline & dementia (Paterniti et al., 2002))
 - reduced social participation and isolation (Hodgetts et al., 2017) – bidirectional
 - poorer sleep –not in systematic review (emerging)
 - poorer diet? (mixed)
 - less mental stimulation (mixed)
 - diabetes – linked with subsequent depression (Anstey et al. 2009)

Risk Increases with N of Factors

- One risk factor is associated with an 20% increase in risk of incident dementia, two risk factors with an 65% increased risk and three or more with a doubling of risk compared to no risk (Peters ...Anstey, 2019)
- Large overlap and interaction of risk factors



Happy Healthy Ageing Program



- Targeted older adults with depression and/or anxiety
- Evaluated two versions of a 16 session multidomain CBT + motivational interviewing program (face-to-face vs work-at-home)
- Targeted the following risks:
 - Depression and Anxiety
 - Physical Exercise
 - Social Participation
 - Mental Stimulation
 - Alcohol use and smoking
 - Diet and weight loss

International Psychogeriatrics: page 1 of 11 © International Psychogeriatric Association 2018
doi:10.1017/S1041610218001485

Reducing risk factors for cognitive decline through psychological interventions: a pilot randomized controlled trial

Viviana M. Wuthrich,¹ Ronald M. Rapee,¹ Brian Draper,² Henry Brodaty,³ Lee-Fay Low,⁴ and Sharon L. Naismith⁵

¹Centre for Emotional Health, Department of Psychology, Macquarie University, Sydney, Australia

²School of Psychiatry, University of New South Wales, Sydney, Australia

³Centre for Healthy Brain Ageing, University of New South Wales, Sydney, Australia

⁴Faculty of Health Sciences, University of Sydney, Sydney, Australia

⁵Healthy Brain Ageing Program, The University of Sydney, Sydney, Australia

ABSTRACT

Objectives: Modifiable factors associated with increased risk of cognitive decline include emotional (anxiety, depression), cognitive (low social and mental stimulation), and health factors (smoking, alcohol use, sedentary lifestyle, obesity). Older adults with anxiety and depression may be at heightened risk due to direct and indirect impacts of emotional distress on cognitive decline.

Design: Randomized controlled trial

Setting: Community sample attending a university clinic. Participants: 27 participants (female = 20) aged over 65 years ($M = 72.56$, $SD = 6.74$) with an anxiety and/or mood disorder. Interventions: two cognitive behavioral therapy (CBT) interventions (face-to-face or low intensity) that targeted emotional, health, and cognitive risks for cognitive decline.

Measurements: Participants completed diagnostic interviews; self-report measures of anxiety, depression, quality of life, and lifestyle factors at baseline; post-treatment; and 3-month follow-up.

Results: Both interventions resulted in significant and sustained improvements in depression, anxiety, quality of life, and physical and social activity. At post-treatment, face-to-face CBT demonstrated significantly greater improvements in emotional symptoms, alcohol use, and memory (exercise approached significance). At

Current Study – Risk Reduction in Primary Care



- Partnering with a Primary Health Network, to codesign and evaluate a prevention approach to screening and intervention
 - Testing attitudes to risk screening
 - Developing approaches to utilise routine data to screen for risks to wellbeing and dementia
 - Evaluating the best methods to communicate results to patients & GPs
 - Evaluate effectiveness of prevention/treatment based efforts

Acknowledgements



The Ian Potter
Foundation

Medical Research
Future Fund



Collaborators:

Sydney North Primary Health Network

Professor Simon Willcock, Professor Mike Jones, Dr Henry Cutler, Dr Carly Johnco, Dr Diana Matovic, Dr Malene Ahern

Contact Details

Viviana Wuthrich
Centre for Ageing, Cognition & Wellbeing,
Macquarie University, Sydney, NSW

Viviana.Wuthrich@mq.edu.au



Late-life depression and dementia – health profiles, health services use and transition to dementia

Simone Reppermund



Centre
for Healthy
Brain Ageing



Late-life depression is one of the most common psychiatric disorder in older adults (3%-10% in 65+)

Due to demographic changes and longer life expectancy, dementia prevalence will triple in next 40 years

Older adults are at risk for depressive symptoms and decreasing cognitive function

Depression and the risk for dementia

Depression and Risk for Alzheimer Disease

Systematic Review, Meta-analysis, and Metaregression Analysis

Raymond L. Ownby, MD, PhD, MBA; Elizabeth Crocco, MD; Amarilis Acevedo, PhD;
Vineeth John, MD; David Loewenstein, PhD *Arch Gen Psychiatry.* 2006;63:530-538

→ OR 2.03 (1.81-2.28)

Dementia risk estimates associated with measures of depression: a systematic review and meta-analysis

Nicolas Cherbuin, Sarang Kim, Kaarin J Anstey *BMJ Open* 2015;5:e008853. doi:10.1136/bmjopen-2015-008853

→ HR 1.98 (1.50-2.63)

Late-life depression and risk of vascular dementia and Alzheimer's disease: systematic review and meta-analysis of community-based cohort studies

Breno S. Diniz, Meryl A. Butters, Steven M. Albert, Mary Amanda Dew and Charles F. Reynolds 3rd
BJP 2013, 202:329-335.

→ OR 1.85 (1.67-2.04)

Risk of Dementia in persons who have previously experienced clinically-significant Depression, Anxiety, or PTSD: A Systematic Review and Meta-Analysis

J.K. Kuring, J.L. Mathias, L. Ward *J Affect Disord* 2020; 274:247-261

→ OR 1.91 (1.72-2.12)

- Depression is a risk factor for dementia
- Depression can also be a prodromal feature of dementia

Health profiles and health service use in late-life depression



What can health profiles and health service use tell us about the risk of developing dementia in people with late-life depression (LLD)?

Aims:

- 1) map health profiles and health service use in LLD and in other MH disorders
- 2) examine the transition to dementia in LLD and in other MH disorders by comparing health profiles and health service use

Data Linkage

Linkage contains 35,257,037 records for 2,199,534 individuals

HEALTH

DISABILITY

CORRECTIONS

OTHER

Admitted Patients

(2001-2016)

Emergency Department

(2005-2016)

Ambulatory Mental Health

(2001-2015)

Disability Services

(2005-2015)

Offenders data

(1994-2016)

Corrective Services

Disability

(2001-2016)

Public Guardian NSW (1994-2016)

NSW Ombudsman (2002-2015)

Education Disability dataset

(2011-2015)

Registry of Births, Deaths & Marriages

(1994-2016)

Death Unit Record (1985-2013)

Reppermund et al. BMJ Open 2017; 7:e015627

Reppermund et al. BMJ Open 2019; 9:e031624.

Cohorts

55,717 people with LLD
(aged 65+)

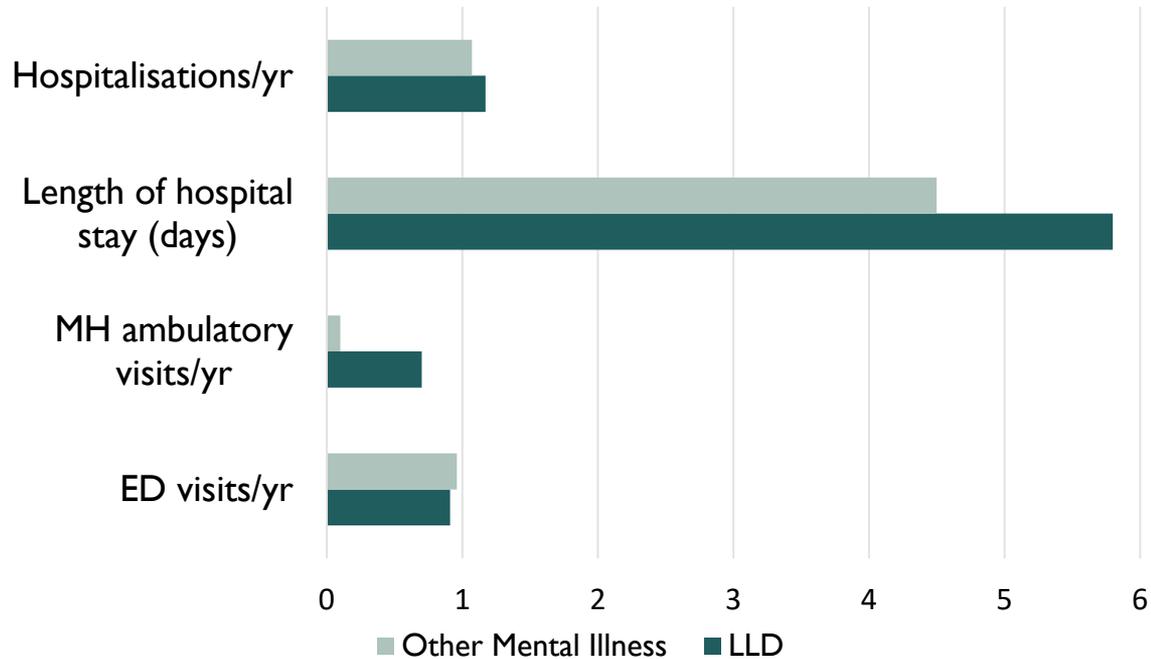
10,457 (18.8%)
subsequent dementia
62% female

104,068 people with
other mental illnesses
(aged 65+)

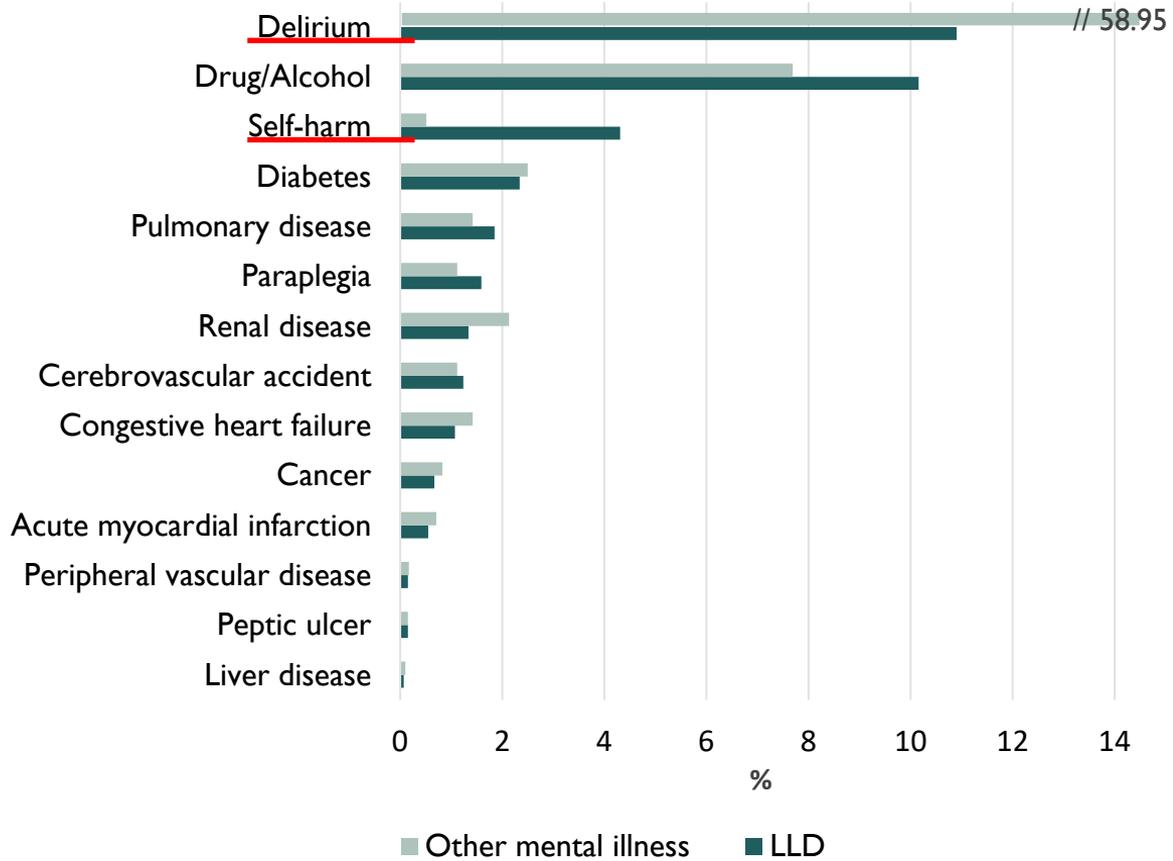
18,103 (17.4%)
subsequent dementia
57% female

- Age at dementia diagnosis: 78 years (LLD) versus 80 (other mental illnesses)
- Average time to dementia after diagnosis of LLD: 2.6 years versus 2 years for other mental illnesses

Health service use



Comorbidities



Delirium

- Overlap in clinical features of delirium and depression¹
- Potential under-recognition of delirium in LLD
- Focus on prevention is needed

Self-harm

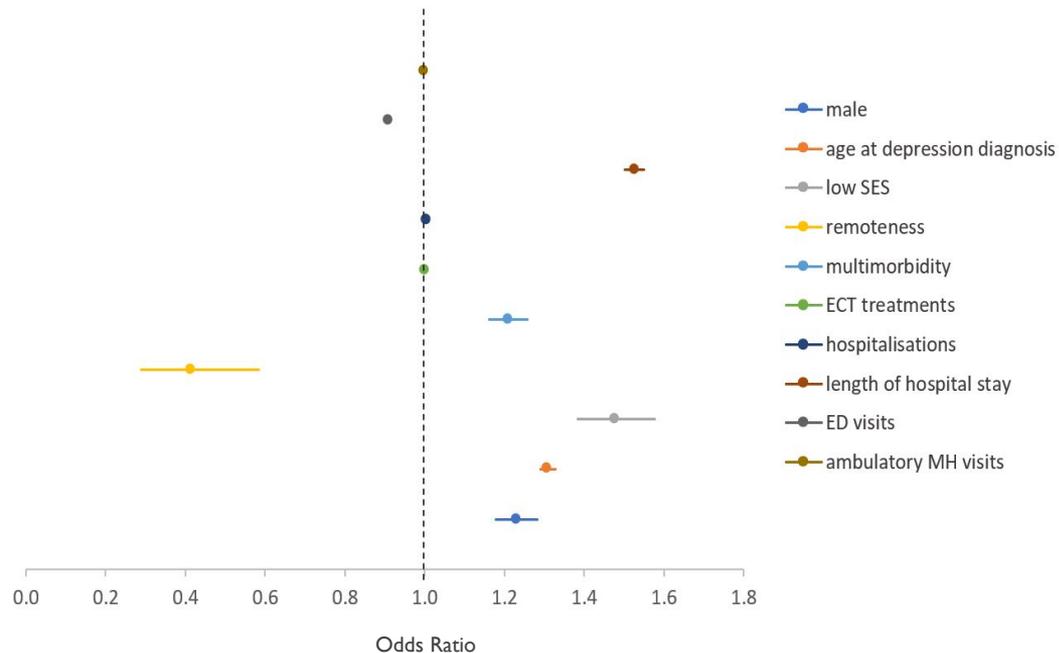
- Depression is linked to self-harm and suicide²
- Increased risk of suicide after self-harm³

¹O'Sullivan et al. Lancet Psychiatry 2014; 1:303-11

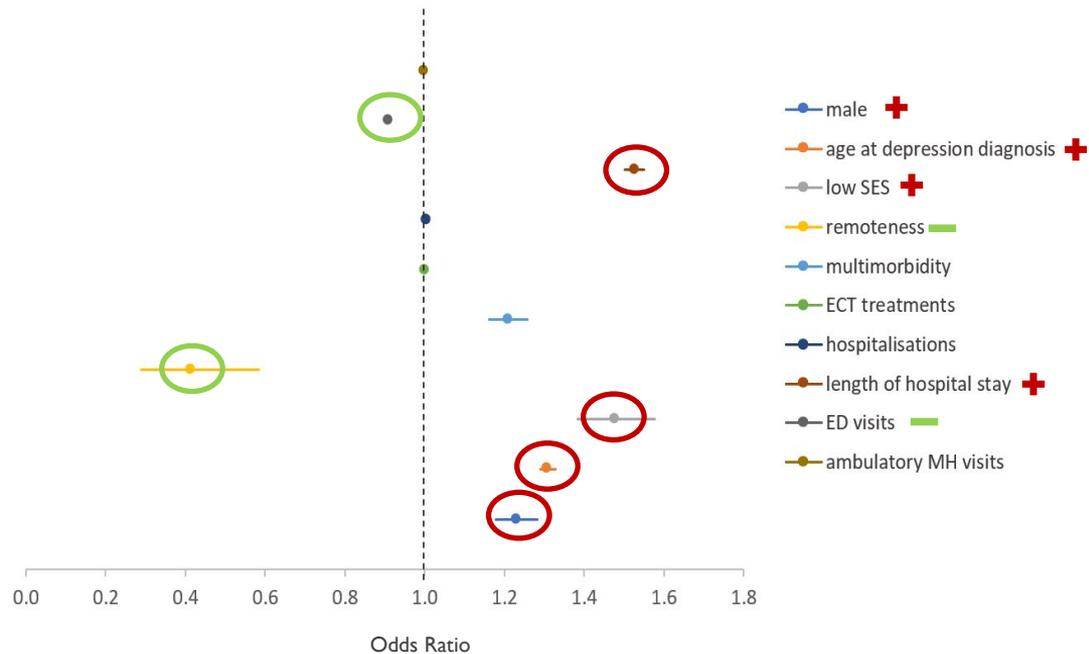
²Mitchell et al. Aging & Mental Health 2017; 21:279-88

³Morgan et al. Lancet Psychiatry 2018; 5:905-12

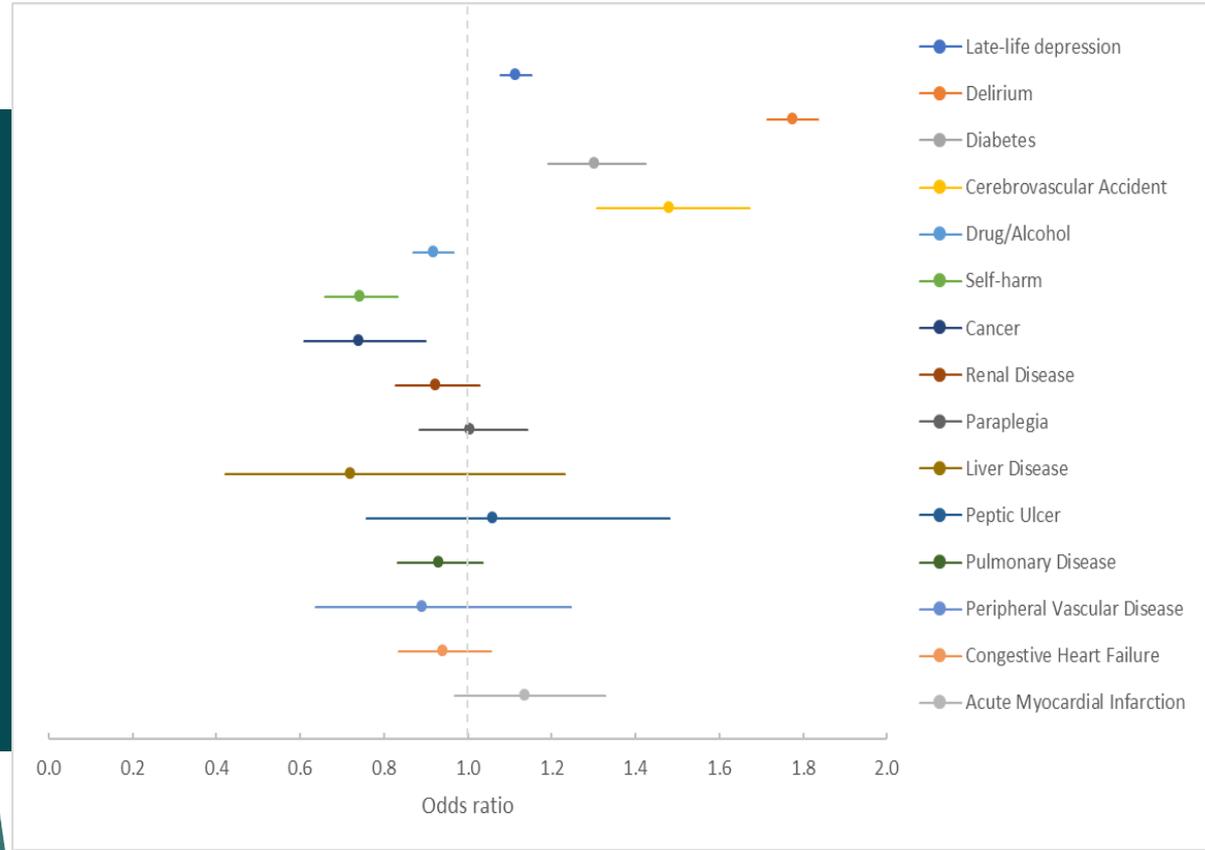
Risk of dementia: demographics and health service use



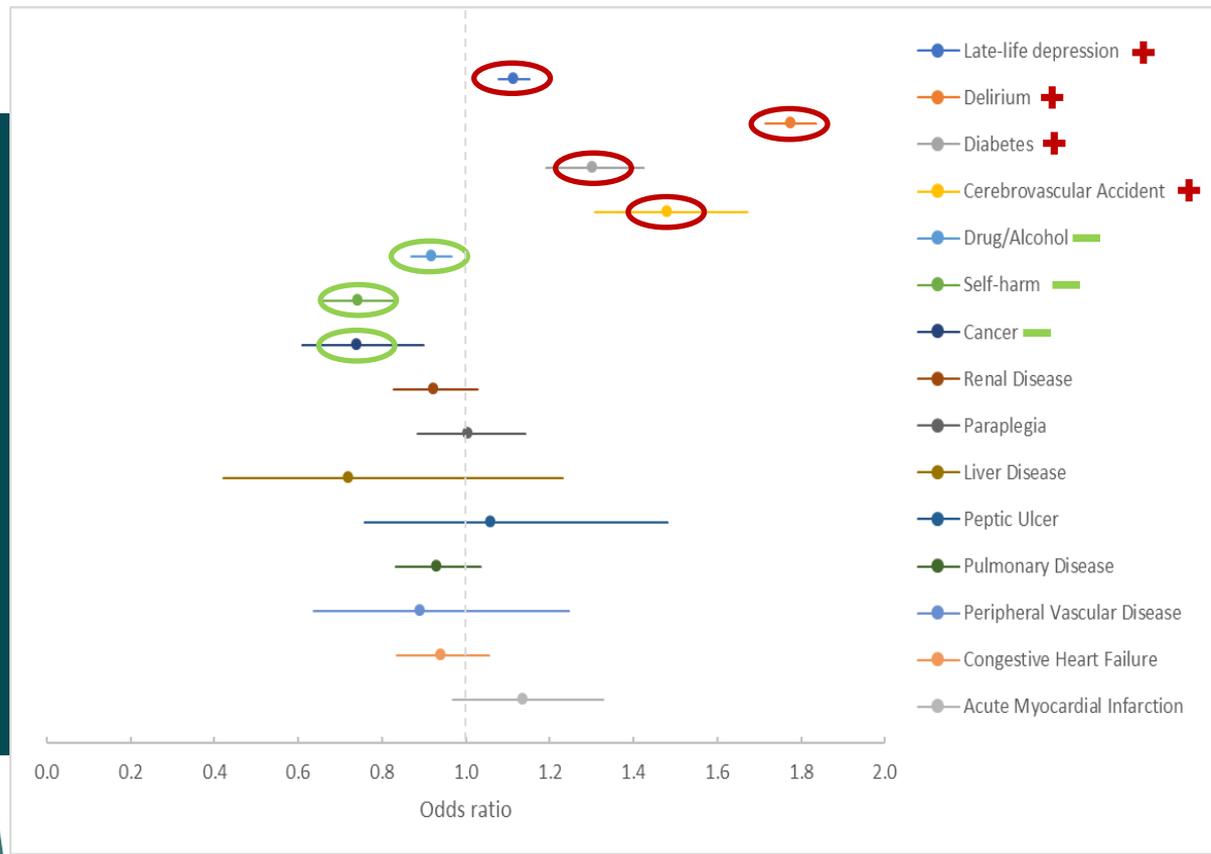
Risk of dementia: demographics and health service use



Risk of dementia: comorbidities



Risk of dementia: comorbidities



Summary

Reppermund et al. JAMDA 2021; 22:1465-70

Increased risk of dementia for people with LLD
(OR: 1.12; 95% CI 1.08-1.52)

Rate of delirium was 6 times lower in LLD
Rate of self-harm was 8 times higher in LLD

The risk of dementia increased by age, male sex, lower SES, and longer hospital stays. People with more ED visits had a lower risk of dementia

Increased risk of dementia: cerebrovascular accidents, diabetes, delirium
Decreased risk of dementia: cancer, self-harm, alcohol/other drugs diagnosis

Conclusions

- Treatment and prevention strategies for LLD and delirium may help to reduce the risk of dementia
- Increased clinical attention to the physical health of older people with mental illness is needed
- Analysis of medication data and GP consultations and comparison with population-based sample

Limitations

- No primary care data and limited private care data
- Diagnoses based on hospital admission data
- Lack of detailed clinical information

Thank you!

Funding sources

NHMRC Partnerships for Better Health Grant; APPI056128

UNSW Scientia Fellowship

Special thanks to Dr Tess Heintze
for the data analysis



DEPARTMENT OF
DEVELOPMENTAL
DISABILITY
NEUROPSYCHIATRY



Centre
for Healthy
Brain Ageing

Adapting Mental Health Treatment to Older Adults with Cognitive Concerns

Sherry A. Beaudreau, PhD, ABPP

Investigator, Sierra Pacific MIRECC, VA Palo Alto Health Care System,
Palo Alto, CA, USA

Clinical Professor (Affiliated), Psychiatry & Behavioral Sciences,
Stanford University School of Medicine, Stanford, CA, USA

Honorary Associate Professor, School of Psychology,
University of Queensland, Brisbane, Australia

Anxiety and Depression in Dementia (ADD) Research Network
Inaugural International Symposium 9.17.2021 AEST (9.16.21 Pacific US ST)

Disclosure

Views expressed in this presentation are those of the speaker and do not necessarily reflect the views of the U.S. Government, or the U.S. Department of Veterans Affairs, and no official endorsement should be inferred

No relevant financial disclosures

Cognitive Concerns

None

Some cognitive concerns

Neurocognitive disorders

No
Cognitive
Concerns,
but...

Mild Behavioral Impairment (MBI)

- Major behavioral change in past 6 months
 - No neurocognitive or psychiatric diagnosis
 - No functional changes

Many older adults with MBI convert to dementia

- *Dementia conversion over 5-year follow up*
 - 34% with MCI (of 239)
 - 70% with MBI no cognitive concerns
- *Taragano et al., 2009 J Clin Psychiatry*

Some Cognitive Concerns, but No Neurocognitive Disorder

Subjective concerns

Below expectation for age & education

- Age-related vs. Life long
- Cognitive functioning often lower than expected with late life psychiatric symptoms and psychiatric disorders

Mild impairments

Among
Neurocognitive
Disorders...

Not all persons with mild neurocognitive disorders convert to major neurocognitive disorders / dementia

Critical role of neuropsychiatric symptoms and disorders, such as anxiety and depression



“The burden of Alzheimer’s disease (AD) is compounded by neuropsychiatric symptoms (NPS) which occur in almost all patients, and are usually persistent.”



Leoutsakos et al., 2005 J Alzheimers Dis

Cognition and Emotion Regulation

- Lower performance in some neurocognitive domains in older adults with higher severity of anxiety and depressive compared with those with minimal symptoms (*Beaudreau & O'Hara, 2008*)
- With one exception...
 - (*Beaudreau et al., 2017*)
- Older adults with better cognition use more adaptive coping strategies (*Kramer, et al., in preparation*)
- Older adults with poorer working memory show less emotion conflict adaptation (*Hantke et al., 2017*)
- Older adults with depression and passive suicidal ideation (SI) have poorer executive functioning than those with depression and no passive SI (*Jordan et al., 2020*)

Prevalence of Late Life Mental Health Disorders

Age of onset of 60+ years old for 1 in 4 older adults with a mood disorder and 1 in 2 older adults with an anxiety disorder

Subsyndromal affective disorders in older adults:
1 in 3 for anxiety and 1 in 7 for depression

~1.8 million older Australians will have a mental health diagnosis of an affective disorder and/or dementia by 2057

Karel, Gatz, & Smyer, 2014 Amer Psychologist; Zhang et al., 2015 Translational Psychiatry; Devanad et al., 2004 J Affective Dis; Sajatovic et al., 2005 AJGP; Laborde-Lahoz et al., 2015 Int J Geriatr Psychiatry; [Older Australia at a glance, Demographics of older Australians - Australian Institute of Health and Welfare \(aihw.gov.au\)](#)

Empirical Support for Treatments for Persons with Some Cognitive Concerns or Dementia

PATH

Problem Adaptation
Therapy for Depression w/
Cognitive Impairment
Kiosses et al., 2015 JAMA Psychiatry

Peace of Mind CBT for anxiety in dementia

Paukert et al., 2010 Int Psychogeriatr

Problem Solving Therapy for Depression w/ Executive Dysfunction

*Alexopoulos et al., 2008 Int J
Geriatric Psychiatry*

**Cognitive Behavioral
Therapy (CBT) for
Anxiety in Parkinson's
Disease** *Dissanayaka et al., 2017
Clin Gerontologist*

Problem Solving Training for Home Based Primary Care

*Beaudreau et al., 2021a,b Int
Psychogeriatrics, Clin Gerontologist*

**CBT for Mood, Sleep
Quality, Anxiety, Quality
of Life in Cognitive
Impairment- Review** *Jin et
al., 2021 Alzheimer Dis Assoc Disord*

Common Themes from Treatments Developed for Older Adults with Cognitive Concerns

- Active role of care provider for reinforcing learning and practice
- Treatments fall under the umbrella of cognitive behavioral therapy
- Cognitive therapy de-emphasized or not existent (as with Problem-Solving Therapy)
- Behavioral emphasized
 - Emotion regulation skills through relaxation

Late Life Cognitive Functioning and Mental Health Treatment Outcomes

CBT for depression

- Poor cognitive flexibility = greater treatment response (*Goodkind, et al., 2016 IJGP*)

Problem solving therapy or Supportive therapy for depression

- Slower set-shifting = more likely to have treatment response. (*Beaudreau et al., 2015, AJGP*)
- Inhibition improves with reduced depressive symptoms (*Mackin et al., 2014, AJGP*)

Pharmacotherapy (escitalopram) for Generalized Anxiety Disorder

- Improved anxiety = improved inhibition & memory.
- Independent of anxiety improvement: Working memory, memory, and visuospatial ability improved in those with impaired baseline cognition (*Butters et al., 2011 British Journal of Psychiatry*)

Pharmacotherapy (sertraline) for depression

- Slower speed of processing was associated with worse response (*Sheline et al., 2012, AJP*)

Selecting and Adapting Mental Health Treatment Based on Cognitive Functioning

Do we need to
adapt?

In some cases,
maybe not if
treatment outcome
is optimal for those
with specific types
of neurocognitive
impairments.

Selecting the
treatment type

New
treatment
altogether?

Adapt the existing
treatment

For e.g., poorer response for
depression with executive
dysfunction, better response to
psychological treatments

*(Alexopoulos et al, 2005 Biological
Psychiatry; 2000 Arch Gen Psychiatry)*

Which Treatments to Deliver?

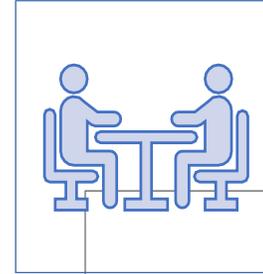


Cognitive Training

- **Restorative**
- “Bottom up” processing
- Restore functioning of neural circuitry underlying impaired cognition

- **Compensatory**
- “Top down” processing
- Not intended to restore, but rather work around or compensate for cognitive impairment

(Adapted from slides from Dr. Twamley)



Psychological Treatment

- Cognitive behavioral therapies (CBTs), including Problem solving therapy

- Standalone skills training or intervention such as relaxation training or behavioral activation alone

- Brief versions of CBT protocols as done in many Primary Care Mental Health Integration settings

Conclusions

Existing protocols for older adults with cognitive concerns suggest that behavioral interventions can be effective for reducing depression or anxiety

Older adults with cognitive concerns but not a neurocognitive disorder might particularly benefit from these behavioral interventions

Adaptations to existing mental health treatment protocols often support neurocognition (e.g., aids to remember materials, carer participation)

With current pandemic, telemental health for delivery of treatments for older adults with cognitive concerns



VA Palo Alto and Stanford Collaborators

- Ruth O'Hara, PhD
- Nathan Hantke, PhD
- Christine Gould, PhD
- Marcela Otero, PhD
- Julie Lutz, PhD

- *VA-STARS (VA/Stanford Research Group)*

Special thanks to:

- Elizabeth Twamley, PhD UC San Diego & VA San Diego Health Care System

Funding and Support:

- Sierra Pacific MIRECC
- Alzheimer's association NIRG-09-133592 (PI: Beaudreau)
- CSR&D Merit CX002177 (PI: Beaudreau)
- NIMH R01 MH091342-05 (PI: Dr. Ruth O'Hara)



Thank you for your attention

Sherry A. Beaudreau, PhD, ABPP

sherryb@stanford.edu or Sherry.Beaudreau@va.gov

Social Media:

[Sherry A. Beaudreau \(@SherryBeaudreau\) / Twitter](#)

[Sherry A Beaudreau \(researchgate.net\)](#)

[Sherry Beaudreau | LinkedIn](#)