

ONLINE SYMPOSIA: DAY 2 Wednesday 11th November 10.00am – 12.30pm AEDT

Anxiety and Depression in Dementia Research Network (ADDResearch)

ABSTRACT PRESENTERS





Dr Claire Burley DCRC, UNSW Sydney



NARI, Swinburne University

EXPERT TALKS & PANEL





Gabiela Pacas Fronza University of Queensland

WELCOME FROM



Prof Elizabeth Beattie DCRC, Queensland University of Technology









Dr Nadeeka Dissanayaka University of Queensland





Prof Henry Brodaty DCRC, UNSW Sydney



Dr Leander Mitchell University of Queensland

Prof Viviana Wuthrich

Macquarie University

Prof Gerard Byrne

University of Queensland



Dr Eamonn Eeles TPCH, University of Queensland

Australian Government National Health and Medical Research Council

For more information on DCRC visit www.dementiaresearch.org.au



DAY 2 DCRC SYMPOSIA: PROGRAM & RUN-SHEET DAY 2: Wednesday 11th November, 10am – 12.30pm AEDT

Event Name:	DCRC Online Symposia Australia		
	Anxiety and Depression in Dementia Research (ADDResearch)		
Date:	Wednesday, 11 th Nov 2020	Time:	10:00am – 12:30pm
			AEDT
Contact Details:	Host / Technical Contact:		
	Matt Rouse (Zoom Webinar Support) Ph: 07 33466648		
	E: <u>m.rouse@uq.edu.au</u>		
	Dr Nadeeka Dissanayaka, E: <u>n.dissanayaka@uq.edu.au</u> Dr Claire Burley, E: <u>c.burley@unsw.edu.au</u>		
	Sandra Jeavons E: <u>s.jeavons@qut.edu.au</u>		

The DCRC Online Symposia will be recorded for broad circulation. Speakers presenting data or information that is not ready for wide circulation will be censored from the recording before distribution.

Time	Action
10:00am – 10:05am	Dr Nadeeka Dissanayaka
AEDT	
10:05am – 10:15am	Prof Elizabeth Beattie, Co-Director DCRC
(10mins)	Welcome
10:15am – 10:25am	Dr Nadeeka Dissanayaka
(7 mins)	ADDResearch Network
Session 1: Abstract	SESSION CHAIR: Dr Nadeeka Dissanayaka
presentations	
10:25am – 11:30am	
10:25am – 10:35am	Presenter 1 – Dr Claire Burley
(7-min talk)	Affiliation: DCRC, University of New South Wales, Sydney



Phone: +61 (0) 403 804 907 Email: DCRC@qut.edu.au Address: Level 6 (N Block), Victoria Park Road, Kelvin Grove QLD 4059, Australia



	Talk Title: Nonpharmacological approaches to reduce symptoms of depression in dementia: A systematic review and meta-analysis
10:35am – 10:45am	Presenter 2 - Prof Colleen Doyle
(7-min talk)	Affiliation: National Ageing Research Institute
	Talk Title: Impact of extra social support on depression and
	loneliness for people with dementia
10:45am – 10:55am	Presenter 3 – Gabriela Pacas Fronza
(7-min talk)	Affiliation: PhD Scholar, The University of Queensland Centre for
	Clinical Research
	Talk Title: What can anxiety in dementia look like and can
	psychotherapy help? Introducing a Tele-CBT program for anxiety
	in cognitive impairment.
10:55am – 11:05am	Presenter 4 – A/Prof Muireann Irish
(7-min talk)	Affiliation: Brain and Mind Centre, The University of Sydney
	Talk Title: Anhedonia and its potential overlap with apathy and
	depression in frontotemporal dementia (FTD)
11:05am – 11:15am	Q&A from zoom questions
(10 minutes)	
11:15am – 11:20am	Break for 5 minutes
(5 minutes)	
Session 2: Expert	SESSION CHAIR: Dr Claire Burley
panel presenters on	
their <u>view point of</u>	
current status and	
discussion on	
future research	
with Q&A.	
11:20am – 12:20pm	
11:20am - 11:30am	Panel expert 1
(10-min talk)	Expert: Dr Leander Mitchell
	Affiliation: School of Psychology, The University of Queensland



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	Talk Title: Evaluation of Anxiety and Depression in people living
	with Dementia
11:30am - 11:40am	Panel expert 2
(10-min talk)	Expert: Prof Gerard Byrne
	Affiliation: Director, Older Persons Mental Health Service, Royal
	Brisbane & Woman's Hospital and The University of Queensland
	Talk Title: Should we be including care partners when evaluating
	anxiety in people living with dementia?
11:40am – 11:50am	Panel expert 3
(10-min talk)	Expert: Prof Viviana Wuthrich
	Affiliation: Director, Centre for Ageing, Cognition and Wellbeing,
	Macquarie University
	Talk Title: Psychosocial Interventions for Anxiety and Depression
	in Dementia
11:50am-12:00pm	Panel expert 4
(10 mins talk)	Expert: Dr Eamonn Eales
	Affiliation: The Prince Charles Hospital/ The University of
	Queensland
	Talk Title: A diagnosis support tool in delirium, relevance to
	dementia and psychological symptoms of dementia
12:00pm – 12:20pm	EXPERT PANEL DISCUSSION & AUDIENCE Q&A
(20 minutes)	Moderator: Dr Nadeeka Dissanayaka
	EXPERT PANEL: Prof Henry Brodaty, Dr Leander Mitchell, Prof
	Viviana Wuthrich, Dr Eamonn Eales
	'Where do we go next with ADDResearch?'
12:20pm – 12:30pm	Prof Henry Brodaty Summarises
(10 mins)	Dr Nadeeka Dissanayaka: Close



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Online Symposia 2020

Changed Behaviours and Psychological Symptoms Associated with Dementia Wed 4th Nov, 10am – 12.30pm AEDT

Anxiety and Depression in Dementia Research Network (ADDResearch)



Wed 11th Nov, 10am – 12.30pm AEDT

Australian Government

National Health and Medical Research Council

Acknowledgement of the Country

I would like to acknowledge the traditional owners and their custodianship of the land on which this symposium is held, and the land on which our attendees are joining from, and pay respects to Elders past, present and emerging.

Acknowledgement of the Remembrance Day

11/11/2020

Housekeeping

- Q&A function for typing questions please address them to a particular speaker or a general question to the panel
- Session chair/ moderator will refer to Q&A for questions and direct them to the speaker or panel
- Feel free to introduce yourself when you type your question
- Four ~7-minute abstract talks, 10minutes for questions
- 5-minute break
- Four 10-minute expert panel presentations
- Twenty-minute expert panel discussion with Q&A
- Symposia resources will be available on the DCRC website (including webinar recording, speaker bios, contact details, and abstracts) www.dementiaresearch.org.au

 DCRC Research Collaboration

ONLINE SYMPOSIA: DAY 2 Wednesday 11th November 10.00am – 12.30pm AEDT

Anxiety and Depression in Dementia Research Network (ADDResearch)

ABSTRACT PRESENTERS



DCRC, UNSW Sydney

MODERATOR

Dr Nadeeka Dissanayaka University of Queensland

Register FREE https://tinyurl.com

/y5r35lvk

EXPERT TALKS & PANEL



Prof Henry Brodaty

DCRC, UNSW Sydney

A/Prof Muireann Irish University of Sydney

WELCOME FROM

Prof Elizabeth Beattie

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Dr Leander Mitchell

University of Queensland



Dr Eamonn Eeles TPCH, University of Queensland



For more information on DCRC visit www.dementiaresearch.org.au









Prof Gerard Byrne

University of Queensland









Anxiety & Depression in Dementia Research Network (ADDResearch)

Dr Nadeeka Dissanayaka, PhD

NHMRC Boosting Dementia Research Leadership Fellow Head, Dementia & Neuro Mental Health Research Unit The University of Queensland Centre for Clinical Research Faculty of Medicine Affiliate: Neurology, RBWH; Psychology, UQ







Prevalence



- Depression 25% AD: 20% (N_{studies}= 68) DLB: 28% (N_{studies}= 10) VaD: 30% (N_{studies}= 22) FTD: 37% (N_{studies}= 4)
 - Anxiety 14% AD: 5% $(N_{studies} = 9)$ DLB: 50% $(N_{studies} = 1)$ VaD: 14% $(N_{studies} = 4)$ FTD: 9% $(N_{studies} = 1)$ Unspecified dementia: 16% $(N_{studies} = 21)$

Review & Meta-Analysis: Kuring et al 2018; Neuropsychology Review; 28; p393-416



What is Depression and Anxiety?

DSM-5 Depressive and Anxiety Disorders

Depressive Disorders	Anxiety Disorders
Major depression	Generalised anxiety disorder
	Panic disorder
Persistent depressive disorder (Dysthymia)	Agoraphobia
	Social and specific phobia
	Unspecified anxiety

Diagnostic and Statistical Manual Edition 5 criteria; American Psychiatric Association



Rating Scales (Examples)

Depression	Anxiety
Cornell Scale for Depression in Dementia (CSDD)	Rating Anxiety in Dementia (RAID)
Montgomery-Asberg Depression Rating Scale (MADRS)	Geriatric Anxiety Inventory (GAI)
Geriatric Depression Scale (GDS)	Penn State Worry Questionnaire (PSWQ)
Nursing Home Short Depression Inventory (NH-SDI)	The Worry Scale

Depression and Dementia Review: Ciprani et al 2015; European Geriatric Medicine; 6; 479-86

Anxiety in dementia Review: Seignourel et al 2008; Clinical Psychology Review; 28; p1071-82

Anxiety Rating Scales: Goodarzi et al 2019; Alzheimer's & Dementia; 11; p340-7



Pharmacological Treatment

Current Psychiatry Reports (2019) 21: 79 https://doi.org/10.1007/s11920-019-1058-4

COMPLEX MEDICAL-PSYCHIATRIC ISSUES (MB RIBA, SECTION EDITOR)

Advances in Management of Neuropsychiatric Syndromes in Neurodegenerative Diseases

Jeffrey Cummings^{1,2} • Aaron Ritter² • Kasia Rothenberg³

- There are a number of antidepressant RCT for depression in dementia with mixed results
- SSRIs (e.g. sertraline) and SNRIs (e.g. venlafaxine)
- But no well controlled RCTs for anxiety in dementia



Depression and Anxiety are the main reasons for prescribing psychotropic medication



Indicators listed for prescribing

- 53% of Prescriptions made for psychotropics were Potentially Inappropriate (Beers criteria)
- Residents living with dementia receive >50% prescriptions for antidepressants compared to those without dementia

Brimelow, Wollin, Byrne, Dissanayaka Int Psychogeriatrics 2019, 31 (6), p837-847



BJPsych The British Journal of Psychiatry (2015) 207, 293–298. doi: 10.1192/bjp.bp.114.148130

Review article

Psychological treatments for depression and anxiety in dementia and mild cognitive impairment: systematic review and meta-analysis[†]

Vasiliki Orgeta, Afifa Qazi, Aimee Spector and Martin Orrell



doi:10.1111/psyg.12391

PSYCHOGERIATRICS 2019; 19: 264-275

REVIEW ARTICLE

Cognitive behavioural therapy can be effective in treating anxiety and depression in persons with dementia: a systematic review

Kok-Wai TAY,^{1,2} Ponnusamy SUBRAMANIAM ^{2,3} and Tian P. OEI^{4,5,6}



Now Recruiting!

UQ Tele-CBT Study

6-weeks video-conferencing CBT for people with cognitive impairment

I want to participate

Email: <u>anxietyresearch@uq.edu.au</u>

Phone: 07 3346 5577







- Premorbid personality/ Psychiatric illness
- Acute medical problems: UTIs, pneumonia, dehydration, constipation
- Unmet needs: pain, sleep problems, fear, boredom, loss of control or purpose

- Stress, burden, depression
- Lack of education about dementia
- Communication issues
- Mismatch of expectations and dementia severity

- Over or under stimulation
- Safety issues
- Lack of activity and structure
- Lack of established routines



REVIEWS

Depression and risk of developing dementia

Amy L. Byers and Kristine Yaffe

Abstract | Depression is highly common throughout the life course and dementia is common in late life. Depression has been linked with dementia, and growing evidence implies that the timing of depression may be important in defining the nature of this association. In particular, earlier-life depression (or depressive symptoms) has consistently been associated with a more than twofold increase in dementia risk. By contrast, studies of late-life depression and dementia risk have been conflicting; most support an association, yet the nature of this association (for example, if depression is a prodrome or consequence of, or risk factor for dementia) remains unclear. The likely biological mechanisms linking depression to dementia include vascular disease, alterations in glucocorticoid steroid levels and hippocampal atrophy, increased deposition of amyloid- β plaques, inflammatory changes, and deficits of nerve growth factors. Treatment strategies for depression could interfere with these pathways and alter the risk of dementia. Given the projected increase in dementia incidence in the coming decades, understanding whether treatment for depression alone, or combined with other regimens, improves cognition is of critical importance. In this Review, we summarize and analyze current evidence linking late-life and earlier-life depression and dementia, and discuss the primary underlying mechanisms and implications for treatment.

Byers, A. L. & Yaffe, K. Nat. Rev. Neurol. 7, 323–331 (2011); published online 3 May 2011; doi:10.1038/nrneurol.2011.60



Contents lists available at ScienceDirect

Maturitas



journal homepage: www.elsevier.com/locate/maturitas

Anxiety and risk of dementia: Systematic review and meta-analysis of prospective cohort studies



Parkinsonism and Related Disorders 36 (2017) 63–68



Javier Santabárbara^{a,b,c}, Darren M. Lipnicki^d, Beatriz Villagrasa^e, Elena Lobo^{a,b,c}, Raul Lopez-Anton^{b,c,f,*}

^a Departamento de Medicina Preventiva y Salud Pública, Universidad de Zaragoza, C/Domingo Miral s/n, 50009 Zaragoza, Spain ^b Instituto de Investigación Sanitaria de Aragón (IIS Aragón), Zaragoza, Spain

^c Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Ministry of Science and Innovation, Madrid, Spain ^d Centre for Healthy Brain Ageing, School of Psychiatry, University of New South Wales Medicine, Randwick, Australia

^e Servicio de Psiquiatría, Hospital Clínico Universitario, Avda. San Juan Bosco 15, 50009 Zaragoza, Spain

^f Departamento de Psicología y Sociología, Universidad de Zaragoza, C/Doctor Cerrada 1-5, 50009 Zaragoza, Spain

Anxiety as a Predictor for Cognitive Decline and Dementia: A Systematic Review and Meta-Analysis

Bernice Gulpers, M.D., M.Sc., Inez Ramakers, Pb.D., Renske Hamel, Pb.D., Sebastian Köbler, Pb.D., Richard Oude Voshaar, Prof., Frans Verbey, Prof.

American Journal of Geriatric Psychiatry 2016; 24 (10), p823-42

Anxiety is associated with cognitive impairment in newly-diagnosed Parkinson's disease

Nadeeka N.W. Dissanayaka ^{a, b, c, *}, Rachael A. Lawson ^d, Alison J. Yarnall ^d, Gordon W. Duncan ^{d, e}, David P. Breen ^f, Tien K. Khoo ^g, Roger A. Barker ^f, David J. Burn ^d, On behalf of the ICICLE-PD study group CrossMark

THE UNIVERSITY



SUMMARY: ADDResearch





Contact

Dr Nadeeka Dissanayaka NHMRC Boosting Dementia Research Leadership Fellow UQ Centre for Clinical Research

E: anxietyresearch@uq.edu.au



































Impact of extra social support on depression and Ioneliness for people with dementia

Colleen Doyle National Ageing Research Institute





Australian New Zealand Clinical Trials Registry: http://www.ANZCTR.org.au/ACTRN12619000676112.aspx



Why depression and loneliness in people with dementia?

- Up to one in four Australians feel lonely at least once a week (Australian Psychological Society, 2018)
- One third of people with dementia feel lonely (Alzheimer's Society, 2020)
- Loneliness predicts poor health outcomes:
 - Increased mortality and morbidity rates (Lester, Mead, Graham, Gask & Reilly, 2012)
 - Poor sleep quality (Hawkley & Cacioppo, 2010)
 - Poor mental health outcomes including depression and cognitive decline (Hawkley & Cacioppo, 2010).

Loneliness and cognitive decline

- Social isolation is a modifiable risk factor for cognitive decline (Livingston et al, 2017)
- Living alone may be even more of a risk factor for cognitive decline than previously thought (Desai et al, 2020)
- Lifestyle factors influence the rate of cognitive decline in people with dementia, even after onset of disease (Deschaintre et al, 2009)

Rationale for FRIENDS project

- Community based interventions can be successful in reducing loneliness in people without dementia
- Few systematic studies of modifying loneliness in people with dementia
- Befriending studied for carers of people with dementia
- One small qualitative study of befriending for people with dementia
- Lack of knowledge of effect of befriending people with dementia

Research questions

- Can befriending improve loneliness in people with dementia?
- Is befriending acceptable for people with dementia?
- Is providing befriending by volunteers feasible?
Current study: FRIENDS project

- ANZCTR in progress
- Phase 1 co-design existing befriending training program for volunteers
- Phase 2 pilot RCT evaluation of feasibility and acceptability of the intervention
- Participants people with mild or moderate dementia, recruited from memory clinics, community service providers and social media

Methods

- Tele-health enabled approach
- Befriending face to face or via phone/video call
- Volunteers provided with additional support to facilitate conversation
- Befriending at least weekly for 6 months
- Examine feasibility and acceptability before proceeding to definitive clinical effectiveness RCT

Measures

- Demographic data
- SMMSE, RUDAS
- UCLA, DEM-QOL, Lubben Social Network Scale
- Befriending records, length of conversation, topics
- GDS
- Satisfaction with intervention (qual interviews)
- Volunteers DKAS, communication asst tool, satisfaction, self efficacy, confidence

Acknowledgements

FRIENDS project investigators

Colleen Doyle (CI), Sunil Bhar, Claudia Cooper, Anita Goh, Moyra Mortby, Samantha Loi (ECR), Jade Cartwright (ECR), Viviana Wuthrich

Seeking funding..

Befriendas project investigators

Colleen Doyle (CI), Sunil Bhar, Christina Bryant, David Dunt, Briony Dow, George Mnatzaganian, Daniel O'Connor, Julie Ratcliffe

Befriendas funded by: NHMRC, Beyond Blue, Perpetual Impact

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Bringing research to life



What can anxiety in dementia look like and can psychotherapy help?

Introducing a Telehealth Psychotherapy for Anxiety in Persons with Cognitive Impairment

Gabriela Pacas Fronza

The University of Queensland Centre for Clinical Research (UQCCR)



What is known about anxiety in dementia?



Prevalent and persistent across dementia stages (Aalten et al., 2005)



Prevalence in dementia 14-75% (Breitve et al., 2016; Kuring et al., 2018) Prevalence in Mild Cognitive Impairment 10-74% (Chen et al., 2018; Monastero et al., 2009)



Anxiety can further compromise cognitive performance (Banks et al., 2014)



Anxiety negatively affects the overall quality of life (Poon, 2019)



Conceptual framework of anxiety in dementia





Anxiety in the context of dementia



Apprehensions of dementia symptoms



Negative expectations of the ability to cope in various situations



Lack of understanding of dementia in the society



Maintaining personal identity in the context of dementia diagnosis

Worry themes related to dementia



Worry themes	Thought content	Emotions	Behaviours
Self-identity	"I want to remain me." "I cannot trust myself anymore."	Sadness, depression Denial, dissociation Frustration, anger Acceptance, reframing	Avoidance, (self-) criticism, Using humour Disclosure and normalizing
Loss of independence and Becoming a burden	"I no longer can take care of myself and/or others." "I'm going to lose my personal/financial independence."	Guilt, disgust, Self-blame, devaluation Acceptance, humility, contentment Stress, anxiety	Withdrawal, Adjusting activities, Accepting/offering help
Interpersonal relationships	"I will embarrass myself and others." "I will lose my loved ones." "People will take advantage of me."	Distrust, vulnerability, Shame, loneliness, fear of abandonment Stress, anxiety, frustration	Withdrawal, avoidance, following others, defensiveness, Community engagement



Telehealth Psychotherapy for Anxiety in People with Cognitive Impairment



6-week psychotherapeutic program



Telehealth videos to facilitate delivery



Including support persons/care partners



Psychoeducation about anxiety

Relaxation exercises to ease anxiety

Therapy outline





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What's next:

- \rightarrow Feasibility pilot study to assess the ease of use of the therapy
- \rightarrow RCT to test outcomes on anxiety, depression and quality of life
- \rightarrow Evidence-based and remotely delivered psychotherapeutic program
- \rightarrow Increase awareness and accessibility of psychotherapeutic interventions

We invite people who are living with MCI or dementia and who often feel worried, have "busy minds", "what if" thoughts or any other experiences of anxiety to express their interest to volunteer in the study.



Thank you

Acknowledgment

Supervisors:

Dr. Nadeeka Dissanayaka Dr. Leander Mitchell Prof. Gerard Byrne

Collaborators: Prof. Nancy Pachana Prof. Viviana Wuthrich

Tiffany Au Julia Yang Karthick Thangavelu

Students enrolled in the Doctor of Psychology program at UQ

Community and Partners: Consumer and Community Advisory Group Members **Participants**

Lions Clubs Australia



Contact:

Dementia and Neuro Mental Health Research Unit The University of Queensland Centre for Clinical Research Faculty of Medicine, Brisbane E: <u>anxietyresearch@uq.edu.au</u>

W: <u>https://clinical-research.centre.uq.edu.au/psychotherapy-</u> telehealth-video-conferencing-treat-anxiety





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LINKING DECISION-MAKING, DEPRESSION & ANXIETY IN DEMENTIA

Dr Leander Mitchell Clinical Psychologist | Clinical Neuropsychologist





Dementia...

° I can no longer....

• You can no longer...



What are the key aspects of making a decision?

 Grisso & Abbelbaum (1998) highlight that the capacity to decide relies on the ability to:

- 1. Communicate a choice
- 2. Understand the relevant information
- 3. Appreciate the situation and its consequences
- 4. Display reasoning

Negative Outcomes

- Loss of independence
- Potential for the obstruction of basic rights
- Reduced quality of life
- Reduced self-efficacy
- Reduced activity levels
- Artificial alteration of the role of the person
- Risk of depression
- Risk of anxiety
- Exacerbate cognitive issues

Helping to make decisions, & reducing the risk of depression & anxiety

- "A good understanding of the person and the support they might need is essential in making sure that people with dementia are able to make their own decisions..." (alzheimers.org.uk)
- Open communication & discussion
- Listening, really listening
- Empathy & respect
- \circ Problem-solving

Shared decision making

Dementia...

• I can still....

•You can still...

But we also need more research in this area (both from the perspective of the person with dementia, and their carer/family/staff)



Thank you!

Dr Leander Mitchell Clinical Psychologist | Clinical Neuropsychologist

If you have met **ONE PERSON WITH** DEMENTIA, you've only met one person. That is, EACH INDIVIDUAL WILL TALK, ACT, REMEMBER, **& BEHAVE DIFFERENTLY,** not simply because of what stage of dementia they are in, but **BECAUSE THEY ARE** WHO THEY ARE.



Anxiety in Dementia Including findings from a Memory Clinic cohort

Gerard Byrne

University of Queensland, Brisbane, Australia Royal Brisbane & Women's Hospital, Brisbane, Australia

gerard.byrne@uq.edu.au





DCRC Symposium: 11 November 2020

Anxiety in People with Dementia

- Of 398 patients with Alzheimer's disease, 5% met diagnostic criteria for GAD over the past 4 weeks (Chemerinski et al. 1998; Argentinian neurology clinic; SCID; HAM-A)
- In the Cache County Study 8% of 214 people with dementia due to Alzheimer's disease had NPI anxiety (Lyketsos et al. 2000; United States; NPI)
- Of 333 Dutch nursing home residents, 29.7% had anxiety symptoms, 4.2% had sub-threshold anxiety disorders, and 5.7% had an anxiety disorder (Smalbrugge et al. 2005; Netherlands; SCAN)

Chemerinski et al. (2008) *Depression & Anxiety*, 74: 166-170; Lyketsos et al. (2000) *American Journal of Psychiatry*, 157(5): 708-714; Smalbrugge et al. (2005) *Journal of Affective Disorders*, 88(2): 145-153. Note: 12-month prevalence of any anxiety disorder in people 65+ in NSMHWB 2007 was about 4%.



Anxiety in Depression, Dementia & Psychosis in Older People



Bakkane Bendixen et al. *Dement Geriatr Cogn Disord* 42: 310-322, 2016 GAI: Geriatric Anxiety Inventory (usual cut point for anxiety disorder 8/9)



CSF Findings in Anxious Adults with Mild Cognitive Impairment

- CSF data from the DESCRIPA and ADNI studies were combined for 268 participants with Mild Cognitive Impairment (MCI)
- Anxiety measure: Neuropsychiatric Inventory (NPI)
- Anxiety (n = 35; 13%) was associated with abnormal CSF Aβ42 (OR 2.3; 95% CI: 1.6-3.3)) and t-tau (OR 2.6; 95% CI: 1.9-3.6)
- Depression (n = 55; 21%) and Apathy (n = 49; 18%) were not related to CSF markers

Ramakers et al. (2013) *Psychological Medicine*, 43: 911-920. [CSF: cerebrospinal fluid]



Anxiety & Subsequent Dementia

- In the ZARADEMP study, a random sample of 4,057 dementia-free community dwellers aged 55 years and over were followed for 4.5 years
- GMS-AGECAT anxiety neurosis cases at baseline were associated with AD at follow-up (independent of depression)
- HR for AD risk: 3.90 (95% CI: 1.59-9.60)
- PAF for AD: 6.11% (95% CI: 1.30-16.17%)
- Subclinical anxiety at baseline was not associated with subsequent AD

Santabárbara et al., *J Affect Disord*, 250: 16-20, 2019 [ZARADEMP study, Zaragoza, Spain]



Personality Change in Alzheimer's Dementia



N: neuroticism; E: extraversion; O: openness; A: agreeableness; C: conscientiousness Green: change in same direction as in normal ageing; Orange: change in opposite direction to normal ageing; N rises 1-2 SDs; C declines 2-3 SDs.

Robins Wahlin & Byrne (2011) International Journal of Geriatric Psychiatry 26: 1019-1029.



Anxiety in Memory Clinic Attendees Patient Characteristics

- N = 199 memory clinic attendees (each with an informant)
- Age: mean 77.9 years (SD 6.9, range 60-94)
- Gender: 109 (54.8%) female, 90 (45.2%) male
- Marital status: 119 (61.0%) married/de facto, 50 (25.6%) widowed
- Education: 41 (20.6%) completed at least 12 years
- Accommodation: 193 (98.5%) private residence, 3 (1.5%) residential aged care facility



Diagnoses

- Major neurocognitive disorder (dementia) 129 (64.8%)
 - Probable Alzheimer's disease 89
 - Mixed dementia 16
 - Vascular dementia 10
 - Lewy body dementia 4
 - FTD (PPA) 1
 - Uncertain type 9 (investigations pending)
- Mild neurocognitive disorder (MCI) 46 (23.1%)
- Subjective memory complaints (SMC) 24 (12.1%)
- Anxiety disorder (any) 33 (17.1%)
 - Generalized anxiety disorder (GAD) 18 (9.1%)
- Major depression 16 (8.0%)



Scale Scores for Memory Clinic Attendees By Cognitive Function Category

	SMC	МСІ	Dementia	All Attendees
Age*	74.5 (5.9)	76.9 (7.2)	79.0 (6.7)	77.9 (6.9)
sMMSE**	27.7 (1.7)	25.2 (3.6)	21.0 (4.6)	22.8 (4.8)
CIRS-G	6.9 (2.8)	7.9 (3.2)	6.2 (3.5)	6.7 (3.4)
HAM-A	13.8 (7.9)	10.6 (6.5)	11.5 (4.8)	11.6 (5.7)
GAI*	7.6 (6.5)	4.7 (5.2)	3.5 (4.7)	4.3 (5.2)
IQAD*	28.1 (7.4)	22.6 (7.0)	23.6 (6.5)	23.9 (6.9)
CSDD	5.0 (3.3)	3.2 (2.6)	3.3 (2.8)	3.5 (2.9)

*p < 0.01, **p < 0.001

sMMSE: standardized Mini-Mental State Examination; CIRS-G: Cumulative Illness Rating Scale - Geriatrics ; HAM-A: 14-item Hamilton Anxiety Rating Scale; GAI: 20-item Geriatric Anxiety Inventory; IQAD: 10-item Informant Questionnaire for Anxiety in Dementia; CSDD: 19-item Cornell Scale for Depression in Dementia; SMC: Subjective Memory Complaints; MCI: Mild Cognitive Impairment. SMC 24 (12.1%), MCI 46 (23.1%), Dementia 129 (64.8%)

Prevalence of Any Anxiety Disorder By Category of Cognitive Function

- Anxiety disorder & SMC
- Anxiety disorder & MCI
- Anxiety disorder & Dementia

8/21 (38.1%) 8/45 (17.8%) 17/127 (13.4%)

Available N reduced to 193 due missing data on some variables.Dementia: major neurocognitive disorderMCI: mild cognitive disorder (mild neurocognitive disorder)SMC: subjective memory complaint



Prevalence of GAD By Category of Cognitive Function

- GAD & SMC 7/24 (2
- GAD & MCI 3/46 (6.59
- GAD & Dementia

7/24 (29.2%) 3/46 (6.5%) 8/129 (6.2%)

GAD: DSM-IV generalized anxiety disorderSMC: subjective memory complaintMCI: mild cognitive disorder (mild neurocognitive disorder)Dementia: major neurocognitive disorder
HAM-A vs GAI vs IQAD for Detection of GAD

Comparison of ROC AUCs in Memory Clinic Attendees



N = 197 Chi square = 3.17, p = 0.2050

HAM-A, GAI & IQAD all perform well in detecting GAD in Memory Clinic attendees. No significant differences in the ROC AUCs.

HAM-A: Hamilton Anxiety Rating Scale; GAI: Geriatric Anxiety Inventory; IQAD: Informant Questionnaire for Anxiety in Dementia.

HAM-A vs GAI vs IQAD for Detection of GAD

Comparison of ROC AUCs in Dementia Patients



N = 127 Chi square = 2.14, p = 0.3426

All three scales detect GAD satisfactorily in patients with dementia attending a memory clinic. There is no significant difference between the three scales.



Conclusions

- Anxiety occurs commonly in older memory clinic attendees
- It appears to fall in relative prevalence as cognitive function declines
- Self-ratings of anxiety hold up reasonably well as cognition deteriorates, at least in communityresiding older people
- The next step is to translate existing (mainly nonpharmacological) anxiety treatments into formats suitable for people with MCI and dementia



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Look out for our book coming out in 2021:

Anxiety in Older People: Clinical and Research Perspectives

Gerard J Byrne & Nancy A Pachana (Eds); Cambridge University Press





Psychosocial Interventions to Reduce Anxiety and Depression in Dementia

VIVIANA WUTHRICH CENTRE FOR AGEING, COGNITION & WELLBEING



Prevalence of Depression & Anxiety in Dementia



- Anxiety is prevalent in older adults with dementia rates range 8-71% (Ballard et al., 2007; Delphin-Combe et al., 2016, Wilkes et al., 2013)
- Depressive symptoms in people with dementia range between 10-62% (Enacheet al., 2011)
- Anxiety and depression decrease the ability to live independently, increase the risk of institutionalisation (Lyketsos et al., 1997)
- Anxiety and depressive symptoms in the patient are also strongly related to caregiver distress (Aarsland et al., 2009; Gonzalez-Salvado et al, 1999)

Psychological Treatment of Depression & Anxiety in Dementia



- Orgeta et al (2015) systematic review and meta-analysis of psychological interventions for depression and anxiety in dementia and MCI. N=6
 - Significant improvements in depression but not anxiety
- **Brown Wilson** et al (2019). Systematic review of non-pharmacological interventions on primary anxiety in dementia N=13
 - Insufficient evidence to determine any significant effect on anxiety
- **Kishita** et al (2020) systematic review of systematic reviews of nonpharmacological interventions in dementia (depression, anxiety, QOL) N=14
 - Depression: Music-based therapeutic interventions (SMD=0.27) and psychological treatment (CBT) (SMD = 0.22) only significant effects
 - Anxiety: Music-based therapeutic interventions (SMD= 0.43) only significant effects. Psychological treatment (CBT) demonstrated a significant effect on staff-reported anxiety (MD=4.57) but no effect on self-reported anxiety





- Due to the progressive neurodegenerative nature of dementia, sufferers often become dependent on support from others for physical and emotional needs
- Caregiver burden and symptoms of depression and anxiety are very high in carers
- Emerging research on psychological programs that incorporate carers as "coaches" for example in Parkinson's disease (Calleo et al., 2015; Wuthrich & Rapee, 2019)



Delivery Methods





- Novel delivery methods are needed in this population
 - Living at home with limited mobility or symptoms that make leaving the house difficult
 - RACF
 - Carers may need to be involved
 - Telephone based interventions have shown some success
 - Video conferencing is promising

Depression & Anxiety in Parkinson's disease



- Depression and anxiety are experienced by up to 50% of people with Parkinson's disease (Broen et al., 2016; Dissanayaka et al., 2010)
- Frequently co-occur, associated with poorer functioning, wellbeing and greater physical and cognitive decline (Landau et al., 2016)
- Carers experience high rates of depression (Aarsland, Marsh & Schrag, 2009)
- Systematic review and meta-analysis found SSRIs and CBT significantly improved depression in people with Parkinson's disease; however, findings based on a small number of studies (Bomasang-Layno et al., 2015)
- Very limited research on treatment of anxiety in Parkinson's disease. One small RCT found CBT delivered either over the telephone or face-to-face, was superior to usual care for managing anxiety and depression (Calleo et al., 2015). CBT was associated with large significant effect size reductions in depression, and non-significant but still large effect sizes for anxiety. Interestingly 67% of participant chose to receive CBT over the telephone

Piloting a telehealth CBT intervention



- CBT manualised intervention to treat depression and/or anxiety in patients with Parkinson's disease
- Delivered over the telephone
- Involved carers



Participants



- 11 participants (7 male, age range 56-85 years, mean = 68.82, SD = 9.35)
- Aged ≥50 years with Parkinson's disease, recruited through flyers in the Stand by Me Parkinson's NSW consumer newsletter, and flyers distributed by support groups for people with Parkinson's disease across NSW
- Inclusion criteria: clinically significant anxiety symptoms (Geriatric Anxiety Inventory > 6) and/or depressive symptoms (Geriatric Depression Scale -15 scores > 5). Exclusion: ≥3 errors on the Six item Cognitive Screener (Callahan et al., 2002)
- Participants were invited to nominate a carer that could assist them to work through the program, but it was optional





- *Demographics*. Participant demographics included current medications, medical history and socio-economic information.
- *Geriatric Anxiety Inventory* (Pachana et al., 2007)
- Geriatric Depression Scale 15 item short form (Sheik & Yesavage, 1986),
- World Health Organisation Quality of Life -Brief (WHOQOL Group, 1998)
- Carer: Depression, Anxiety and Stress Scales (DASS: Lovibond & Lovibond, 1995), Zarit Burden Inventory Short Form (Bedard et al., 2001)
- Treatment Acceptability & Feedback. Participants and carers rated treatment acceptability (rating 1 =not acceptable, to 5=very acceptable), helpfulness (rating 1 =not helpful to 5=very helpful), and how likely they are to recommend it to a friend (rating 1 =not recommend, to 5=definitely recommend), and feedback on usefulness and barriers.

Intervention



- Participants randomly allocated to Ageing Wisely with Parkinson's disease (Wuthrich, 2016) (Manualised CBT program) or waitlist.
- CBT program: 10 weekly manualised sessions (workbook) supported by 45 minute telephone consultations with an intern clinical psychologist using a therapist manual. Skills: psychoeducation, activity scheduling, mood monitoring, helpful thinking, communication skills, relaxation.
 - The program included the same skills for the carer to manage their own distress.
- 14 week post treatment assessment, and 1 month follow-up





- No significant differences at baseline on demographic variables
- CBT:
 - Significant decrease in depression pre to post-treatment with large effect sizes (Cohen's d = .90)
 - Benefits maintained at 1-month follow up
 - Anxiety decreased from pre to post with small to moderate effect size reduction (Cohen's d = 0.36), but the decrease was non-significant. No significant changes on QOL.
- Wait List:
 - No significance improvements (all small effect size changes), and anxiety significantly worsened over time from baseline to follow-up





"Being able to access this program at home was very beneficial for me, as I am unable to leave

home easily due to my husband's Parkinson's disease"

"The skills helped me in reducing worries and managing low mood, and to be more assertive"

"Telephone support was also more helpful than I expected, and helpful due to my mobility limitations"

"The program highlights for me were: 1) Made me more aware of myself, challenges, and ability to do something; 2) I'm not the only one with difficulties and I need to make the most of what I've got; 3) I'm now taking more time to use problem solving which eases my mind."

What is needed?



- Rigorous clinical trials
 - Larger sample sizes
 - Valid measures
 - Intent-to-treat



- Novel intervention methods and approaches
 - underlying mechanisms anxiety
 - adaptable (symptom presentation, delivery methods)
 - consider the role of the carer





- NHMRC & Beyond Blue co-funded Multisite trial (6 sites)
- Telehealth/ Internet & Face-to-Face Psychological Interventions
- Seeking: Older adults (cognitively normal) aged 65 years and above with low mood, worry or anxiety, anywhere across Australia.
- More information:
 <u>www.tiny.cc/STOP-Study</u>
 STOP@mq.edu.au
 (02) 9850 8715





Centre for Ageing, Cognition & Wellbeing

HTTPS://WWW.MQ.EDU.AU/RESEARCH/CACW



CENTRE FOR AGEING, COGNITION, AND WELLBEING



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)



Metro North Hospital and Health Service Putting people first



The Prince Charles Hospital

A DIAGNOSIS SUPPORT TOOL IN DELIRIUM, RELEVANCE TO DEMENTIA AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA

ANXIETY AND DEPRESSION IN DEMENTIA RESEARCH NETWORK

EELES E, DAKIN L, FRASER J, LING C, HUANG L, KAUR P, DISSANAYAKA N

So what of dementia?

Dementia is a independent risk factor for delirium¹ Delirium makes the trajectory of dementia worse² Delirium is an independent risk factor for dementia³ Delirium is also associated with affect changes, anxiety, distress plus recall distress⁴

1. Kalimisetty K, 2017, 2. Davis D, 2018, 3. Caplan GA, 2020 4. Hosie A, 2014



Australian Commission on Safety and Quality in Healthcare-**Delirium Clinical Care Standard**

A patient with delirium is offered a set of interventions to treat the causes of delirium based on a comprehensive assessment.



Need an app for that?

As a decision support tool to assists in identifying the contributing causes of delirium.

> Team developed and conducted preliminary testing of a delirium etiology diagnostic support tool: iD8.

Aims

- 1. To develop a delirium diagnostic support tool; iD8.
- 2. To validate the management algorithm iD8 against current usual care in the diagnostic assessment of delirium causes by assessing its feasibility in detecting causes of delirium.

Objective is to develop and test the first of its kind delirium etiology decision support tool that could be translated into an electronic version.

Algorithm: **iD8**

Mobile

· Is the gait normal?



If gait normal then go to fever questions

iD8 reduced the diagnostic assessment of delirium into *eight* steps.

- Refined through an iterative process by the working group.
- Thresholds deduced from evidence-based medicine principles.
- Feedback from consultant geriatrician colleagues and consumers.

Results N=40, 360

Characteristics	N=40
Female, n (%)	26(65.1%)
Mean age, years (SD)	85.1(7.9)
CCI, Median (IQR)	7(6–9)
Medications, average (IQR	8 (6-9)
Use of benzodiazepine, antipsychotic or antidepressant, n (%)	17(42.5%)
Living in own home, n (%)	27(67.5%)

Statistic	Value	95% CI
Sensitivity	88.8%	81.6% to 93.9%
Specificity	71.8%	63% to 79.5%
Positive Predictive Value	74.6%	68.8% to 79.7%
Negative Predictive Value	87.3%	80.2% to 92.0%

Delirium in relation to anxiety depression



Id8 Delirium Etiology Diagnostic Support Tool

Models for Predicting Incident Delirium in Hospitalized Older Adults: A Systematic Review. Kalimisetty S, Askar W, Fay B, Khan A.Kalimisetty S, et al. J Patient Cent Res Rev. 2017 Apr 25;4(2):69-77.

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Predisposing and precipitating factors for delirium in community-dwelling older adults admitted to hospital with this condition: A prospective case series. Magny E, Le Petitcorps H, Pociumban M, Bouksani-Kacher Z, Pautas É, Belmin J, Bastuji-Garin S, Lafuente-Lafuente C.Magny E, et al. PLoS One. 2018 Feb 23;13(2):e0193034.

Complete, advice below

=

- Info Consider causes of painful hip
- Info Complete neurological exam and consider focal CNS causes
- Info Look for consequences of a fall such as a traumatic brain injury, musculoskeletal injury or pain
- Info Detailed joint exam and consider infection, inflammation or fracture

Reset

Recommendations