

Anxiety in older adults often goes undiagnosed

Koychev I, Ebmeier KP. Anxiety in older adults often goes undiagnosed.

Practitioner 2016;260(1789):17-20

Dr Ivan Koychev
PhD MRCPsych
Clinical Lecturer

Professor Klaus P. Ebmeier
MD
Professor of Old Age Psychiatry
University of Oxford Department of Psychiatry,
Warneford Hospital, Oxford, UK



Anxiety in older adults often goes undiagnosed

AUTHORS

Dr Ivan Koychev

PhD MRCPsych
Clinical Lecturer

Professor Klaus P. Ebmeier

MD
Professor of Old Age
Psychiatry

University of Oxford
Department of
Psychiatry, Warneford
Hospital, Oxford, UK



How should anxiety disorders be diagnosed?



ANXIETY DISORDERS ARE CONSIDERED TYPICAL OF CHILDHOOD AND EARLY ADULTHOOD, BUT ARE

in fact also commonly experienced in community-dwelling older adults. Approximately 15-50% experience significant anxiety, with 1.2-15% attracting a formal diagnosis of anxiety-related disorder.¹ This proportion rises to over 20% in carers of people with dementia.²

Anxiety disorder in the elderly is therefore twice as common as dementia and four to six times more common than major depression.³ Anxiety is associated with poorer quality of life,⁴ significant distress⁵ and contributes to

What are the treatment approaches?

the onset of disability.⁶ Mortality risks are also increased, through physical causes, especially cardiovascular disease,^{7,8} and suicide.⁹ The cost of late life anxiety disorders increases exponentially with age, through direct care for anxiety itself¹⁰ and as a result of exacerbation of existing medical conditions and increased use of healthcare services.¹¹ Despite their significant prevalence and

‘Anxiety disorder in the elderly is twice as common as dementia’

Which patients should be referred?

impact, anxiety disorders remain underdiagnosed and undertreated.¹²

Ninety per cent of diagnosable anxiety disorders in older adults are generalised anxiety disorder (GAD) or specific phobias,¹³ with GAD accounting for more than half of all anxiety diagnoses.¹⁴ Obsessive compulsive disorder (OCD), panic disorder and post-traumatic stress disorder (PTSD) make up the other 10%.

First-onset presentations are rare at this age, with 50-97% being exacerbations of earlier onset anxiety disorders.¹⁴

Diagnosing anxiety disorders in older adults remains a challenge because of the significant overlap in symptoms »

Table 1

FEAR questionnaire (adapted from Krasucki et al³¹)

Main question	Follow-up question	Scoring
In the past month have you felt so fidgety or restless that you couldn't sit still?	IF YES: Do you know what brought it on? Was it worry, fear or something else?	Score 1 if restlessness caused by worry/fear/anxiety
Do you take anything to help you relax?	What about sedative tablets or alcohol?	Score 1 if taking medication or alcohol to relax
How often, if at all, have you worried in the past month?		≤ some days score 0 ≥ most days score 1
Have you felt on edge, strung up or mentally tense in the past month?		≤ some days score 0 ≥ most days score 1

A score of 2 or more predicts a high likelihood of the presence of an anxiety disorder (sensitivity 77% and specificity 83%)

between physical disorders (shortness of breath; abdominal and chest pain; palpitations) and depression (disturbed sleep; poor attention, concentration and memory; restlessness).

PRESENTATION

GAD is the most common disorder and is characterised by excessive and difficult to control worry about a number of life domains (e.g. health, relationships, finance) of more than six months' duration. It is accompanied by physical symptoms, such as fatigue, sleep disturbance and agitation, with physical presentations being more common in the elderly.¹⁵ These somatic symptoms frequently create diagnostic ambiguity especially when chronic physical disorders are also present.¹⁶ Depression is a major comorbidity to the extent that some have questioned whether GAD is an independent syndrome in older adults.¹ Importantly comorbidity is linked to greater risks for depression becoming chronic.¹⁷

Specific phobia refers to a persistent irrational fear of something that poses little or no actual danger. It is associated with loss of function through avoidance behaviour. Fear of crowds or going out is the leading focus of specific phobia in older adults (80% of new onset cases¹⁸). It is not usually a component of panic disorder as is frequently the case in younger adults. Instead it tends to follow traumatic events such as falls, physical illness or aggression from others.¹⁹ Fear of falls is an-age specific anxiety occurring in 30-77% of those who have had a fall.²⁰ It has an independent functional effect leading to restriction of social and physical activity beyond the physical effects of falls.²¹ This avoidance

in turn leads to poorer quality of life,²² and increases the risk of further falls through poor balance and lack of physical conditioning.²³ Older adults also have more frequent phobias of natural phenomena (e.g. lightning, heights).²⁴

OCD, panic disorder and PTSD tend to occur in the context of physical illness or dementia. New onset idiopathic OCD is relatively rare, with the vast majority of patients graduating from general adult settings or with age-related changes limiting the individual's ability to resist long-term subclinical obsessional.²⁵

'A number of drugs may be causative or cause anxiety in withdrawal'

Preoccupations tend to shift towards sin and religion thus replacing contamination fears, symmetry concerns or counting rituals, which are more common in younger people.²⁶ New onset cases do occur prodromal to dementia, where preoccupation with newly difficult routines (e.g. toileting and medication schedules) may be the presenting feature.²⁶ Panic disorder in older adults tends to present with more shortness of breath than with other physical features.²⁷

PTSD may either occur in response to a new trauma (e.g. falls, physical illness, traumatic events) or may be a new manifestation of dormant trauma (e.g. in war veterans), which is re-activated by personal losses (e.g. bereavement, retirement), or news of war.²⁸

EXAMINATION AND INVESTIGATION

Good history taking is crucial in elucidating whether the complaint is of new onset or whether it is a recurrence of a previous disorder.

The presence of comorbid depression should be clarified. If present, its temporal relationship with the anxiety symptoms will indicate whether there is an independent anxiety disorder.

A medication review is warranted, as a number of drugs may be causative (calcium channel blockers, alpha- and beta-blockers, digoxin, L-thyroxine, bronchodilators, steroids, theophylline, antihistamines) or may cause anxiety in withdrawal (e.g. benzodiazepines).²⁹ Substance and alcohol abuse should be excluded, as withdrawal from either may cause anxiety.

A new or exacerbated physical illness may be related to anxiety, and patients should undergo basic investigations to exclude:²⁹

- Anaemia
- Cardiovascular and cerebrovascular pathology
- Diabetes and hypoglycaemia
- Hyperthyroidism
- Hypocalcaemia, hyponatraemia, hyperkalaemia
- COPD

Medical investigations will help clarify the extent to which a particular somatic symptom is the result of anxiety. Longitudinal follow-up of patients and their response to adequate treatment will be key in confirming the diagnosis.

Measuring anxiety

Measures of anxiety are often developed with the general adult population in mind. They are less valid when applied

key points

SELECTED BY

Dr Phillip Bland

GP with an interest in mental health, Dalton-in-Furness

Anxiety disorder in the elderly is twice as common as dementia and four to six times more common than major depression. Anxiety is associated with poorer quality of life, significant distress and contributes to the onset of disability. Mortality risks are also increased, through physical causes, especially cardiovascular disease, and suicide.

Diagnosing anxiety disorders in older adults remains a challenge because of the significant overlap in symptoms between physical disorders (shortness of breath; abdominal and chest pain; palpitations) and depression (disturbed sleep; poor attention, concentration and memory; restlessness).

Good history taking is crucial in elucidating whether the complaint is of new onset or whether it is a recurrence of a previous disorder. The presence of comorbid depression should be clarified. If present, its temporal relationship with the anxiety symptoms will indicate whether there is an independent anxiety disorder.

A medication review is warranted, as a number of drugs may be causative (calcium channel blockers, alpha- and beta-blockers, digoxin, L-thyroxine, bronchodilators, steroids, theophylline, antihistamines) or may cause anxiety in withdrawal (e.g. benzodiazepines). Substance and alcohol abuse should be excluded, as withdrawal from either may cause anxiety. A new or exacerbated physical illness may be related to anxiety. Medical investigations will help clarify the extent to which a particular somatic symptom is the result of anxiety.

The evidence-based treatments for generalised anxiety disorder (GAD) based on studies in older adults are SSRIs. While pregabalin has gained a place as first-line treatment in GAD the evidence in older patients is promising, but limited. Cognitive behaviour therapy (CBT) is an important treatment option, but there is no evidence that combining pharmacotherapy with CBT leads to an augmented response. CBT and also relaxation training and supportive therapy have been shown to have independent positive effects on anxiety in older adults, as well as on limiting the use of benzodiazepines.

Referral to secondary services, community mental health teams, may be appropriate if the first or second line of treatment fails, there is comorbid major depression, which worsens the treatment prospects, or if there are significant concurrent medications with the risk of interactions.

to older adults, because of reliance on somatic symptoms and questions having multiple possible answers.

The Geriatric Anxiety Inventory was developed specifically for the older adult population and is relatively brief (20 items), provides only dichotomous choices (agree or disagree) and probes a very limited number of somatic symptoms.³⁰ A score of 11 indicates a high likelihood of GAD, identifying 83% of GAD patients correctly (sensitivity 75%, specificity 84%), while a score of 9 confers a high likelihood of any anxiety disorder (correctly classifies 78% of patients; sensitivity 73%, specificity 80%).

The four-item FEAR questionnaire has been developed specifically for assessment of elderly primary care attenders, see table 1, opposite.³¹ It can be used to clarify the diagnosis in a clinical consultation, exploring dimensions that may not be covered in a routine interview. It is a shortened version of the Anxiety Disorder Scale (ADS), which had good validity and inter-rater reliability in detecting anxiety disorders in a community sample aged over 65 years.³²

The FEAR questionnaire includes four items of the ADS probing:

- Frequency of anxiety
- The enduring nature of anxiety
- Use of alcohol or sedatives to reduce anxiety
- Presence of restlessness or fidgeting

A score of 2 or more predicts a high likelihood of an anxiety disorder (sensitivity 77% and specificity 83%).

MANAGEMENT

Most patients are effectively treated within primary care, using primary care access to psychological therapy, such as Improved Access to Psychological Therapies (IAPT).

Referral to secondary services, community mental health teams, may be appropriate if the first or second line of treatment fails, there is comorbid major depression, which worsens the treatment prospects, or if there are significant concurrent medications with the risk of interactions (e.g. inhibition of cytochrome P450 by SSRIs leading to increased plasma levels of drugs metabolised by P450, such as phenytoin, warfarin, steroids, theophylline and methadone; risk of exacerbating upper GI bleeds with SSRIs).

Psychiatric teams manage anxiety patients generally in an outpatient setting with hospital admissions confined to instances where there is acute suicidality or risk of self-neglect.

The evidence for treatment in older

adults is limited because randomised controlled trials largely exclude people over the age of 65. Recommendations are frequently derived from working age adults with mainly general applicability to older adults. The principles of pharmacotherapy in this age group are to start in doses of half or a quarter of the normal adult starting dose and titrate slowly.²⁷

Frequent follow-up for reassurance is crucial, particularly in the group of anxiety patients who tend to be more vigilant of side effects and have a low threshold for treatment discontinuation. Benzodiazepines are still relatively frequently prescribed,³³ but come with serious side effects such as worsening of cognitive function and risk of life-threatening falls.

'Primary care plays a crucial role in initiating timely treatment'

A meta-analysis of the available studies in older adults found that CBT and pharmacotherapy had large effects on treating anxiety relative to placebo with improvement still present at 37 weeks.³⁴

The evidence-based treatments for GAD based on studies in older adults are SSRIs, with best evidence for citalopram and sertraline,^{35,36} and venlafaxine.³⁷ While pregabalin has gained a place as first-line treatment in general anxiety disorder³⁸ the evidence in older patients is promising, but limited.³⁹ Evidence for age-specific options in GAD treatment resistance is lacking,⁴⁰ as is evidence for efficacy in the other disorders in older people. Therefore first-line treatments are based on experience from working age adults (SSRIs and SNRIs). Clomipramine and other tricyclic antidepressants have traditionally had good effects in the treatment of OCD but they should be used with caution in older adults because of cardiac and severe anticholinergic side effects.

Cognitive behaviour therapy (CBT) is an important treatment option, but there is no evidence that combining pharmacotherapy with CBT leads to an augmented response.³⁸

CBT and also relaxation training and supportive therapy have been shown to have independent positive effects on anxiety in older adults, as well as on limiting the use of benzodiazepines.^{5,41,42} CBT models that account for the difficulties in comprehension and

»

SYMPOSIUM CARE OF THE ELDERLY

ANXIETY IN OLDER ADULTS

retaining information in older adults have been developed (e.g. simplify treatment rationale and interventions, between sessions telephone reminders) and a pilot trial reported improved anxiety scores with the modified therapy.⁴³

CONCLUSION

Anxiety disorders are common in older age and carry significant risks for deterioration in quality of life and overall physical health. Diagnosis has traditionally been hampered by the large overlap between anxiety symptoms and those associated with depression and physical illness.

Primary care plays a crucial role in identifying patients and initiating timely treatment, an intervention with the potential for a wide-ranging impact.

REFERENCES

- 1 Bryant C, Jackson H, Ames D. The prevalence of anxiety in older adults: methodological issues and a review of the literature. *J Affect Disord* 2008;109(3):233-50
- 2 Mahoney R, Regan C, Katona C, Livingston G. Anxiety and depression in family caregivers of people with Alzheimer disease: the LASER-AD study. *Am J Geriatr Psychiatry* 2005;13(9):795-801
- 3 Regier DA, Boyd JH, Burke JD Jr et al. One-month prevalence of mental disorders in the United States. Based on five Epidemiologic Catchment Area sites. *Arch Gen Psychiatry* 1988;45(11):977-86
- 4 Brenes GA, Guralnik JM, Williamson JD et al. The influence of anxiety on the progression of disability. *J Am Geriatr Soc* 2005;53(1):34-9
- 5 Ayers CR, Sorrell JT, Thorp SR, Wetherell JL. Evidence-based psychological treatments for late-life anxiety. *Psychol Aging* 2007;22(1):8-17
- 6 Seeman TE, Berkman LF, Charpentier PA et al. Behavioral and psychosocial predictors of physical performance: MacArthur studies of successful aging. *J Gerontol A Biol Sci Med Sci* 1995;50(4):M177-83
- 7 Smoller JW, Pollack MH, Wassertheil-Smoller S et al. Panic attacks and risk of incident cardiovascular events among postmenopausal women in the Women's Health Initiative Observational Study. *Arch Gen Psychiatry* 2007;64(10):1153-60
- 8 Tully PJ, Baker RA, Knight JL. Anxiety and depression as risk factors for mortality after coronary artery bypass surgery. *J Psychosom Res* 2008;64(3):285-90
- 9 Allgulander C, Lavori PW. Causes of death among 936 elderly patients with 'pure' anxiety neurosis in Stockholm County, Sweden, and in patients with depressive neurosis or both diagnoses. *Comprehensive Psychiatry* 1993;34(5):299-302
- 10 Greenberg PE, Sisitsky T, Kessler RC et al. The economic burden of anxiety disorders in the 1990s. *J Clin Psychiatry* 1999;60(7):427-35
- 11 Wolitzky-Taylor KB, Castriotta N, Lenze EJ et al. Anxiety disorders in older adults: a comprehensive review. *Depress Anxiety* 2010;27(2):190-211
- 12 van Hout HP, Beekman AT, de Beurs E et al. Anxiety and the risk of death in older men and women. *Br J Psychiatry* 2004;185:399-404
- 13 Krasucki C, Howard R, Mann A. Anxiety and its treatment in the elderly. *Int Psychogeriatr* 1999;11(1):25-45
- 14 Ferretti L, McCurry SM, Logsdon R et al. Anxiety and Alzheimer's disease. *J Geriatr Psychiatry Neurol* 2001;14(1):52-8
- 15 Turnbull JM. Anxiety and physical illness in the elderly. *J Clin Psychiatry* 1989;50 Suppl:40-5
- 16 Palmer BW, Jeste DV, Sheikh JI. Anxiety disorders in the elderly: DSM-IV and other barriers to diagnosis and treatment. *J Affect Disord* 1997;46(3):183-90
- 17 Schoevers RA, Deeg DJ, van Tilburg W, Beekman AT. Depression and generalized anxiety disorder: co-occurrence and longitudinal patterns in elderly patients. *Am J Geriatr Psychiatry* 2005;13(1):31-9
- 18 Livingston G, Watkin V, Milne B et al. The natural history of depression and the anxiety disorders in older people: the Islington community study. *J Affect Disord* 1997;46(3):255-62
- 19 Oxman TE, Barrett JE, Barrett J, Gerber P. Psychiatric

symptoms in the elderly in a primary care practice. *Gen Hosp Psychiatry* 1987;9(3):167-73

- 20 Kressig RW, Wolf SL, Sattin RW et al. Associations of demographic, functional, and behavioral characteristics with activity-related fear of falling among older adults transitioning to frailty. *J Am Geriatr Soc* 2001;49(11):1456-62
- 21 Tennstadt S, Lawrence R, Kasten L. An intervention to reduce fear of falling and enhance activity: Who is most likely to benefit? *Educ Gerontol* 2001;27(3-4):227-40
- 22 Arfken CL, Lach HW, Birge SJ, Miller JP. The prevalence and correlates of fear of falling in elderly persons living in the community. *Am J Public Health* 1994;84(4):565-70
- 23 Cumming RG, Salkeld G, Thomas M, Szonyi G. Prospective study of the impact of fear of falling on activities of daily living, SF-36 scores, and nursing home admission. *J Gerontol A Biol Sci Med Sci* 2000;55(5):M299-305
- 24 Fredrikson M, Annas P, Fischer H, Wik G. Gender and age differences in the prevalence of specific fears and phobias. *Behav Res Therapy* 1996;34(1):33-9
- 25 Colvin C, Boddington SJ. Behaviour therapy for obsessive compulsive disorder in a 78-year-old woman. *Int J Geriatr Psychiatry* 1997;12(4):488-91
- 26 Kohn R, Westlake RJ, Rasmussen SA et al. Clinical features of obsessive-compulsive disorder in elderly patients. *Am J Geriatr Psychiatry* 1997;5(3):211-5
- 27 Cassidy K-L, Rector N. The silent geriatric giant: Anxiety disorders in late life. *Geriatr Aging* 2008;11(3):150-6
- 28 Kaup B, Ruskin P, Nyman G. Significant life events and PTSD in elderly World War II veterans. *Am J Geriatr Psychiatry* 1994;2:239-43
- 29 Banazak D. Anxiety disorders in elderly patients. *J Am Board Fam Pract* 1997;10:280-9
- 30 Pachana NA, Byrne GJ, Siddle H et al. Development and validation of the Geriatric Anxiety Inventory. *Int Psychogeriatr* 2007;19(1):103-14
- 31 Krasucki C, Ryan P, Ertan T et al. The FEAR: a rapid screening instrument for generalized anxiety in elderly primary care attenders. *Int J Geriatr Psychiatry* 1999;14(1):60-8
- 32 Lindesay J, Briggs K, Murphy E. The Guy's/Age Concern survey. Prevalence rates of cognitive impairment, depression and anxiety in an urban elderly community. *Br J Psychiatry* 1989;155:317-29
- 33 Nakafero G, Sanders RD, Nguyen-Van-Tam JS, Myles PR. Association between benzodiazepine use and exacerbations and mortality in patients with asthma: a matched case-control and survival analysis using the United Kingdom Clinical Practice Research Datalink. *Pharmacoepidemiol Drug Saf* 2015;24:793-802
- 34 Pinquart M, Duberstein PR. Treatment of anxiety disorders in older adults: a meta-analytic comparison of behavioral and pharmacological interventions. *Am J Geriatr Psychiatry* 2007;15(8):639-51
- 35 Lenze EJ, Mulsant BH, Shear MK et al. Efficacy and tolerability of citalopram in the treatment of late-life anxiety disorders: results from an 8-week randomized, placebo-controlled trial. *Am J Psychiatry* 2005;162(1):146-50
- 36 Schuurmans J, Comijs H, Emmelkamp PM et al. A randomized, controlled trial of the effectiveness of cognitive-behavioral therapy and sertraline versus a waitlist control group for anxiety disorders in older adults. *Am J Geriatr Psychiatry* 2006;14(3):255-63
- 37 Katz IR, Reynolds CF 3rd, Alexopoulos GS, Hackett D. Venlafaxine ER as a treatment for generalized anxiety disorder in older adults: pooled analysis of five randomized placebo-controlled clinical trials. *J Am Geriatr Soc* 2002;50(1):18-25
- 38 Katzman MA, Bleau P, Blier P et al. Canadian Anxiety Guidelines Initiative Group on behalf of the Anxiety Disorders Association of Canada/Association Canadienne des troubles anxieux and McGill University, Antony MM, Bouchard S, Brunet A et al. Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. *BMC Psychiatry* 2014;14 Suppl 1:S1.doi:10.1186/1471-244X-14-S1-S1.Epub 2014 Jul 2
- 39 Montgomery S, Chatamra K, Pauer L et al. Efficacy and safety of pregabalin in elderly people with generalised anxiety disorder. *Br J Psychiatry* 2008;193:389-94
- 40 Barton S, Karner C, Salih F et al. Clinical effectiveness of interventions for treatment-resistant anxiety in older people: a systematic review. *Health Technol Assess* 2014;18(50):1-59, v-vi
- 41 Barrowclough C, King P, Colville J et al. A randomized trial of the effectiveness of cognitive-behavioral therapy and supportive counseling for anxiety symptoms in older adults. *J Consult Clin Psychol* 2001;69(5):756-62
- 42 Hendriks GJ, Oude Voshaar RC, Keijsers GP et al. Cognitive-behavioural therapy for late-life anxiety disorders: a systematic review and meta-analysis. *Acta Psychiatr Scand* 2008;117(6):403-11
- 43 Mohlman J, Gorenstein EE, Kleber M et al. Standard and enhanced cognitive-behavior therapy for late-life generalized anxiety disorder: two pilot investigations. *Am J Geriatr Psychiatry* 2003;11(1):24-32

Useful information

Age UK
www.ageuk.org.uk

Alzheimer's Society UK
www.alzheimers.org.uk

Anxiety UK
www.anxietyuk.org.uk

OCD UK
www.ocduk.org

We welcome your feedback

If you would like to comment on this article or have a question for the authors, write to:
editor@thepractioner.co.uk