

Nonpharmaceutical Treatment of Anxiety in Institutionalized Older Adults

JOCELYN VANOPDORP, PharmD, and CONNIE KRAUS, PharmD, *University of Wisconsin School of Pharmacy, Department of Family Medicine and Community Health, Madison, Wisconsin*

Help Desk Answers provides answers to questions submitted by practicing family physicians to the Family Physicians Inquiries Network (FPIN). Members of the network select questions based on their relevance to family medicine. Answers are drawn from an approved set of evidence-based resources and undergo peer review.

The complete database of evidence-based questions and answers is copyrighted by FPIN. If interested in submitting questions or writing answers for this series, go to <http://www.fpin.org> or e-mail: questions@fpin.org.

This series is coordinated by John E. Delzell, Jr., MD, MSPH, Assistant Medical Editor.

Clinical Question

What is the best nonpharmaceutical treatment for anxiety in institutionalized older adults?

Evidence-Based Answer

Cognitive behavior therapy (CBT) or relaxation training, alone or in combination, can be used to treat anxiety in older adults. (Strength of Recommendation [SOR]: A, based on a systematic review.) Music therapy can also be used to reduce anxiety in older adults. (SOR: B, based on extrapolations from meta-analyses of randomized controlled trials [RCTs] in the ambulatory setting.) Appropriate training of institutional caregivers is also helpful in reducing anxiety in older adults. (SOR: B, based on a single RCT.)

A systematic review of 19 RCTs (N = 522) analyzed treatment of anxiety and depression in noninstitutionalized patients whose mean age was older than 65 years.¹ The authors studied the effect of CBT alone, relaxation training plus CBT, and relaxation training alone compared with no treatment and an active control (e.g., supportive counseling, psychotherapy, informal CBT training, informal relaxation training, group discussion, reflection, medication management, psychoeducation). Outcomes were reported by mean effect size (0.2 is considered a small effect, 0.6 is moderate, 1.2 is large, and 2.0 is very large). Greater effect sizes occurred with CBT (five trials; N = 55; effect size = 1.2), CBT plus relaxation training (12 trials; N = 170; effect size = 0.86), and relaxation training alone (seven trials; N = 82; effect size = 0.91) than with active control (eight trials; N = 103; effect size = 0.5) or placebo (eight trials; N = 112; effect size = 0.05).

A meta-analysis of seven RCTs (N = 297) evaluated the effect of CBT compared with no treatment or active control on severity of anxiety in adults 60 years and older in ambulatory settings who were diagnosed with generalized anxiety disorder, panic disorder, social phobia, or agoraphobia.² Four trials (N = 146) compared CBT with no treatment, and five trials (N = 243) compared CBT with an active control. The study measured anxiety using the Beck Anxiety Inventory (scale of zero to 63), or the Hamilton Anxiety Rating Scale (scale of zero to 56) if the Beck Anxiety Inventory was not available. CBT was superior to no treatment (standard mean difference [SMD] = -0.44; 95% confidence interval [CI], -0.84 to -0.04) and active control (SMD = -0.51; 95% CI, -0.81 to -0.21) in reducing anxiety.

A meta-analysis of 20 multinational trials (N = 651) evaluated the effect of music therapy on anxiety, depression, behavior, cognition, and activities of daily living in older noninstitutionalized patients (mean age = 75 to 89 years) who were diagnosed with dementia.³ Music therapy occurred two or three days per week. The Rating Anxiety in Dementia scale, the Hamilton Anxiety Rating Scale, and the Japan Stroke Scale were used to rate anxiety symptoms in the eight trials (N = 258) in which anxiety was the primary outcome. Music therapy decreased anxiety compared with the control group (SMD = -0.64; 95% CI, -1.1 to -0.24).

Staff training of institutional caregivers is effective in reducing anxiety in older patients. The Staff Training in Assisted-living Residences (STAR) program consists of two four-hour workshops, on-site con-

sultations, and three leadership sessions to assist caregivers in assisted-living facilities to improve care for residents with dementia.⁴ An RCT to measure the effect of this program included staff (n = 25) and residents (n = 31) from four residential sites. Anxiety was measured with the Clinical Anxiety Scale (range of zero to 100, with anxiety indicated by a score of 30 or higher). From baseline to posttest, residents in the STAR program had a greater decrease in anxiety scores compared with the control group (-3.4 vs. 4.9, $P < .001$).

Copyright Family Physicians Inquiries Network. Used with permission.

Address correspondence to Connie Kraus, PharmD, at connie.kraus@wisc.edu. Reprints are not available from the authors.

Author disclosure: No relevant financial affiliations.

REFERENCES

1. Thorp SR, Ayers CR, Nuevo R, Stoddard JA, Sorrell JT, Wetherell JL. Meta-analysis comparing different behavioral treatments for late-life anxiety. *Am J Geriatr Psychiatry*. 2009;17(2):105-115.
2. Hendriks GJ, Oude Voshaar RC, Keijsers GP, Hoogduin CA, van Balkom AJ. Cognitive-behavioural therapy for late-life anxiety disorders: a systematic review and meta-analysis. *Acta Psychiatr Scand*. 2008;117(6):403-411.
3. Ueda T, Suzukamo Y, Sato M, Izumi S. Effects of music therapy on behavioral and psychological symptoms of dementia: a systematic review and meta-analysis. *Ageing Res Rev*. 2013;12(2):628-641.
4. Teri L, Huda P, Gibbons L, Young H, van Leynseele J. STAR: a dementia-specific training program for staff in assisted living residences. *Gerontologist*. 2005;45(5):686-693. ■



Keep up with the latest in family medicine research.

Order your print subscription today.

AnnFamMed.org/site/subscriptions