

Mental Health Disorders of the Elderly

Kristen Barrio
Kevin Biese

REFERENCES

- Xu KT, Nelson BK, Berk S: The changing profile of patients who used emergency department services in the United States: 1996 to 2005. *Ann Emerg Med* 54: 805, 2009. [PMID: 19811852]
- Fick DM, Agostini JV, Inouye SK: Delirium superimposed on dementia: a systematic review. *J Am Geriatr Soc* 50: 1723, 2002. [PMID: 12366629]
- Fong TG, Jones RN, Shi P, et al: Delirium accelerates cognitive decline in Alzheimer disease. *Neurology* 72: 1570, 2009. [PMID: 19414723]
- Rockwood K, Cosway S, Carver D, Jarrett P, Stadnyk K, Fisk J: The risk of dementia and death after delirium. *Age Ageing* 28: 551, 1999. [PMID: 10604507]
- Kat MG, Vreeswijk R, De Jonghe JFM, et al: Long-term cognitive outcome of delirium in elderly hip surgery patients: a prospective matched controlled study over two and a half years. *Dement Geriatr Cogn Disord* 26: 1, 2008. [PMID: 18562793]
- Davis DH, Terrera GM, Keage H, et al: Delirium is a strong risk factor for dementia in the oldest-old: a population-based cohort study. *Brain* 135: 2809, 2012. [PMID: 22879644]
- Ellison JM, Kyomen HH, Harper DG: Depression in later life: an overview with treatment recommendations. *Psychiatr Clin North Am* 35: 203, 2012. [PMID: 22370499]
- Buntinx F, Kester A, Bergers J, et al: Is depression in elderly people followed by dementia? A retrospective cohort study based in general practice. *Age Ageing* 25: 231, 1996. [PMID: 8670559]
- Gatz JL, Tyas SL, St John P, et al: Do depressive symptoms predict Alzheimer's disease and dementia? *J Gerontol A Biol Sci Med Sci* 60: 744, 2005. [PMID: 15983177]
- Chen R, Hu Z, Wei L, et al: Severity of depression and risk for subsequent dementia: cohort studies in China and the UK. *Br J Psychiatry* 193: 373, 2008. [PMID: 18978315]
- Cankurtaran M, Yavuz BB, Cankurtaran ES, et al: Risk factors and type of dementia: vascular or Alzheimer? *Arch Gerontol Geriatr* 47: 25, 2008. [PMID: 17692938]
- Irie F, Masaki KH, Petrovitch H, et al: Apolipoprotein E epsilon4 allele genotype and the effect of depressive symptoms on the risk of dementia in men: the Honolulu-Asia Aging Study. *Arch Gen Psychiatry* 65: 906, 2008. [PMID: 18678795]
- Saczynski JS, Beiser A, Seshadri S, et al: Depressive symptoms and risk of dementia: the Framingham Heart Study. *Neurology* 75: 35, 2010. [PMID: 20603483]
- Byers AL, Covinsky KE, Barnes DE, et al: Dysthymia and depression increase risk of dementia and mortality among older veterans. *Am J Geriatr Psychiatry* 20: 664, 2012. [PMID: 21597358]
- American Psychiatric Association, Task Force on DSM-IV: *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV*. 4th edition. Washington, DC: American Psychiatric Association; 1994.
- Meagher DJ, Trzepacz PT: Motoric subtypes of delirium. *Semin Clin Neuropsychiatry* 5: 75, 2000. [PMID: 10837096]
- Han JH, Zimmerman EE, Cutler N, et al: Delirium in older emergency department patients: recognition, risk factors, and psychomotor subtypes. *Acad Emerg Med* 16: 193, 2009. [PMID: 19154565]
- Liptzin B, Levkoff SE: An empirical study of delirium subtypes. *Br J Psychiatry* 161: 843, 1992. [PMID: 1483173]
- O'Keefe ST: Clinical subtypes of delirium in the elderly. *Dement Geriatr Cogn Disord* 10: 380, 1999. [PMID: 10473943]
- Marcantonio E, Ta T, Duthie E, et al: Delirium severity and psychomotor types: their relationship with outcomes after hip fracture repair. *J Am Geriatr Soc* 50: 850, 2002. [PMID: 12028171]
- Kelly KG, Zisselman M, Cuttillo-Schmitter T, et al: Severity and course of delirium in medically hospitalized nursing facility residents. *Am J Geriatr Psychiatry* 9: 72, 2001. [PMID: 11156755]
- Peterson JF, Pun BT, Dittus RS, et al: Delirium and its motoric subtypes: a study of 614 critically ill patients. *J Am Geriatr Soc* 54: 479, 2006. [PMID: 16551316]
- Pandharipande P, Cotton BA, Shintani A, et al: Motoric subtypes of delirium in mechanically ventilated surgical and trauma intensive care unit patients. *Intensive Care Med* 33: 1726, 2007. [PMID: 17549455]
- Reeves RR, Parker JD, Burke RS, Hart RH: Inappropriate psychiatric admission of elderly patients with unrecognized delirium. *South Med J* 103: 111, 2010. [PMID: 20065900]
- Nicholas LM, Lindsey BA: Delirium presenting with symptoms of depression. *Psychosomatics* 36: 471, 1995. [PMID: 7568655]
- Farrell KR, Ganzini L: Misdiagnosing delirium as depression in medically ill elderly patients. *Arch Intern Med* 155: 2459, 1995. [PMID: 7503605]
- Hustey FM, Meldon SW, Smith MD, et al: The effect of mental status screening on the care of elderly emergency department patients. *Ann Emerg Med* 41: 678, 2003. [PMID: 12712035]
- Lewis LM, Miller DK, Morley JE, et al: Unrecognized delirium in ED geriatric patients. *Am J Emerg Med* 13: 142, 1995. [PMID: 7893295]
- Han JH, Morandi A, Ely EW, et al: Delirium in the nursing home patients seen in the emergency department. *J Am Geriatr Soc* 57: 889, 2009. [PMID: 19484845]
- McCusker J, Cole M, Abrahamowicz M, Primeau F, Belzile E: Delirium predicts 12-month mortality. *Arch Intern Med* 162: 457, 2002. [PMID: 11863480]
- Francis J, Kapoor WN: Prognosis after hospital discharge of older medical patients with delirium. *J Am Geriatr Soc* 40: 601, 1992. [PMID: 1587979]
- Gustafson Y, Berggren D, Brännström B, et al: Acute confusional states in elderly patients treated for femoral neck fracture. *J Am Geriatr Soc* 36: 525, 1988. [PMID: 2897391]
- Inouye SK, Rushing JT, Foreman MD, Palmer RM, Pompei P: Does delirium contribute to poor hospital outcomes? *J Gen Intern Med* 13: 234, 1998. [PMID: 9565386]
- O'Keefe ST, Lavan J: The prognostic significance of delirium in older hospital patients. *J Am Geriatr Soc* 45: 174, 1997. [PMID: 9033515]
- Kakuma R, du Fort GG, Arsenault L, et al: Delirium in older emergency department patients discharged home: effect on survival. *J Am Geriatr Soc* 51: 443, 2003. [PMID: 12657062]
- Han JH, Eden S, Shintani A, et al: Delirium in older emergency department patients is an independent predictor of hospital length of stay. *Acad Emerg Med* 18: 451, 2011. [PMID: 21521405]
- Han JH, Shintani A, Eden S, et al: Delirium in the emergency department: an independent predictor of death within 6 months. *Ann Emerg Med* 56: 244, 2010. [PMID: 20363527]
- Hustey FM, Meldon SW: The prevalence and documentation of impaired mental status in elderly emergency department patients. *Ann Emerg Med* 39: 248, 2002. [PMID: 11867976]
- Naughton BJ, Moran MB, Kadah H, Heman-Ackah Y, Longano J: Delirium and other cognitive impairment in older adults in an emergency department. *Ann Emerg Med* 25: 751, 1995. [PMID: 7755195]
- Lewis LM, Miller DK, Morley JE, Nork MJ, Lasater LC: Unrecognized delirium in ED geriatric patients. *Am J Emerg Med* 13: 142, 1995. [PMID: 7893295]
- Elie M, Rousseau F, Cole M, Primeau F, McCusker J, Bellavance F: Prevalence and detection of delirium in elderly emergency department patients. *Can Med Assoc J* 163: 977, 2000. [PMID: 11068569]
- Wilber ST: Altered mental status in older emergency department patients. *Emerg Med Clin North Am* 24: 299, 2006. [PMID: 16584959]
- Han JH, Wilson A, Ely EW: Delirium in the older emergency department patient: a quiet epidemic. *Emerg Med Clin North Am* 28: 611, 2010. [PMID: 20709246]
- Gomolin IH, Aung MM, Wolf-Klein G, Auerbach C: Older is colder: temperature range and variation in older people. *J Am Geriatr Soc* 53: 2170, 2005. [PMID: 16398904]
- Wong CL, Holroyd-Leduc J, Simel DL, Straus SE: Does this patient have delirium? Value of bedside instruments. *JAMA* 304: 779, 2010. [PMID: 20716741]
- Marcantonio ER: Delirium. In: Pacala JT, Sullivan GM, eds. *Geriatrics Review Syllabus: A Core Curriculum in Geriatric Medicine*, 7th ed. New York, NY: American Geriatrics Society; 2010:297.
- Inouye SK, van Dyck CH, Alessi CA, Balkin S, Siegal AP, Horwitz RI: Clarifying confusion: the confusion assessment method. A new method for detection of delirium. *Ann Intern Med* 113: 941, 1990. [PMID: 2240918]
- Ely EW, Margolin R, Francis J, et al: Evaluation of delirium in critically ill patients: validation of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU). *Crit Care Med* 29: 1370, 2001. [PMID: 11445689]
- Rahkonen T, Mäkelä H, Paanila S, Halonen P, Sivenius J, Sulkava R: Delirium in elderly people without severe predisposing disorders: etiology and 1-year prognosis after discharge. *Int Psychogeriatr* 12: 473, 2000. [PMID: 11263714]
- Meyer S, Meyer O, Kressig RW: Drug-induced delirium. *Ther Umsch* 67: 79, 2010. [PMID: 20131216]
- Catic AG: Identification and management of in-hospital drug-induced delirium in older patients. *Drugs Aging* 28: 737, 2011. [PMID: 21913739]
- Flaherty JH, Rudolph J, Shay K, et al: Delirium is a serious and under-recognized problem: why assessment of mental status should be the sixth vital sign. *J Am Med Dir Assoc* 8: 273, 2007. [PMID: 17570303]
- El-Kaissi S, Kotowicz MA, Berk M, et al: Acute delirium in the setting of primary hypothyroidism: the role of thyroid hormone replacement therapy. *Thyroid* 15: 1099, 2005. [PMID: 16187922]
- Bayer AJ, Chadha JS, Farag RR, et al: Changing presentation of myocardial infarction with increasing old age. *J Am Geriatr Soc* 34: 263, 1986. [PMID: 3950299]
- Naughton BJ, Moran M, Ghaly Y, et al: Computed tomography scanning and delirium in elder patients. *Acad Emerg Med* 4: 1107, 1997. [PMID: 9408423]
- Hardy JE, Brennan N: Computerized tomography of the brain for elderly patients presenting to the emergency department with acute confusion. *Emerg Med Australas* 20: 420, 2008. [PMID: 18973639]
- Inouye SK, Bogardus ST Jr, Charpentier PA, et al: A multicomponent intervention to prevent delirium in hospitalized older patients. *N Engl J Med* 340: 669, 1999. [PMID: 10053175]
- Inouye SK, Charpentier PA: Precipitating factors for delirium in hospitalized elderly persons. Predictive model and interrelationship with baseline vulnerability. *JAMA* 275: 852, 1996. [PMID: 8596223]
- Meagher DJ, O'Hanlon D, O'Mahony E, Casey PR: The use of environmental strategies and psychotropic medication in the management of delirium. *Br J Psychiatry* 68: 512, 1996. [PMID: 8730950]
- American Psychiatric Association: Practice guideline for the treatment of patients with delirium. *Am J Psychiatry* 156 (Suppl 5): 1, 1999. [PMID: 10327941]
- Han JH, Bryce SN, Ely EW, et al: The effect of cognitive impairment on the accuracy of the presenting complaint and discharge instruction comprehension in older emergency department patients. *Ann Emerg Med* 57: 662, 2011. [PMID: 21272958]

62. Barton C, Yaffe K: Dementia. In: Pacala, JT, Sullivan GM, eds. *Geriatrics Review Syllabus: A Core Curriculum in Geriatric Medicine*, 7th ed. New York, NY: American Geriatrics Society; 2010:274.
63. Hebert LE, Scherr PA, Bienias JL, Bennett DA, Evans DA: Alzheimer disease in the US population: prevalence estimates using the 2000 census. *Arch Neurol* 60: 1119, 2003. [PMID: 12925369]
64. McKeith I, Mintzer J, Aarsland D, et al: Dementia with Lewy bodies. *Lancet Neurol* 3: 19, 2004. [PMID: 14693108]
65. Mosimann UP, McKeith IG: Dementia with Lewy bodies—diagnosis and treatment. *Swiss Med Wkly* 133: 131, 2003. [PMID: 12707840]
66. Folstein MF, Folstein SE, McHugh PR: Mini-Mental State: a practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res* 12: 189, 1975. [PMID: 1202204]
67. Borson S, Scanlan J, Brush M, et al: The Mini-Cog: a cognitive “vital signs” measure for dementia screening in multi-lingual elderly. *Int J Geriatr Psychiatry* 15: 1021, 2000. [PMID: 11113982]
68. Jeste DV, Alexopoulos GS, Bartels SJ, et al: Consensus statement on the upcoming crisis in geriatric mental health: research agenda for the next 2 decades. *Arch Gen Psychiatry* 56: 848, 1999. [PMID: 12884891]
69. Volkert J, Schulz H, Härter M, Włodarczyk O, Andreas S: The prevalence of mental disorders in older people in Western countries: a meta-analysis. *Ageing Res Rev* 12: 339, 2012. [PMID: 23000171]
70. Weissman MM, Bruce ML, Leaf PJ, et al: Affective disorders. In: Robins LN, Regier DA, eds. *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study*. New York, NY: Free Press; 1991:53.
71. Steffens DC, Skoog I, Norton MC, et al: Prevalence of depression and its treatment in an elderly population: the Cache County study. *Arch Gen Psychiatry* 57: 601, 2000. [PMID: 10839339]
72. Kastenschmidt EK, Kennedy GJ: Depression and anxiety in late life: diagnostic insights and therapeutic options. *Mt Sinai J Med* 78: 527, 2011. [PMID: 21748742]
73. Barua A, Ghosh MK, Kar N, Basilio MA: Socio-demographic factors of geriatric depression. *Indian J Psychol Med* 32: 87, 2010. [PMID: 21716860]
74. Gallo JJ, Rabins PV, Lyketsos CG, Tien AY, Anthony JC: Depression without sadness: functional outcomes of nondysphoric depression in later life. *J Am Geriatr Soc* 45: 570, 1997. [PMID: 9158577]
75. Beaudreau SA, O'Hara R: Late-life anxiety and cognitive impairment: a review. *Am J Geriatr Psychiatry* 16: 790, 2008. [PMID: 18827225]
76. Gilbody S, Richards D, Brealey S, Hewitt C: Screening for depression in medical settings with the Patient Health Questionnaire (PHQ): a diagnostic meta-analysis. *J Gen Intern Med* 22: 1596, 2007. [PMID: 17874169]
77. Kroenke K, Spitzer RL, Williams JB: The Patient Health Questionnaire-2: validity of a two-item depression screener. *Med Care* 41: 1284, 2003. [PMID: 14583691]
78. Kroenke K, Spitzer RL, Williams JB: The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med* 16: 606, 2001. [PMID: 20633738]
79. Turvey CL, Conwell Y, Jones MP, et al: Risk factors for late-life suicide: a prospective, community-based study. *Am J Geriatr Psychiatry* 10: 398, 2002. [PMID: 12095899]
80. Huh JT, Weaver CM, Martin JL, Caskey NH, O'Riley A, Kramer BJ: Effects of a late-life suicide risk—assessment training on multidisciplinary healthcare providers. *J Am Geriatr Soc* 60: 775, 2012. [PMID: 22288717]
81. Waern M, Beskow J, Runeson B, et al: Suicidal feelings in the last year of life in elderly people who commit suicide. *Lancet* 354: 917, 1999. [PMID: 10489955]
82. Gfroerer J, Penne M, Pemberton M, Folsom R: Substance abuse treatment need among older adults in 2020: the impact of the aging baby-boom cohort. *Drug Alcohol Depend* 69: 127, 2003. [PMID: 12609694]
83. Taylor MH, Grossberg GT: The growing problems of illicit substance abuse in the elderly: a review. *Prim Care Companion CNS Disord* 14: 4, 2012. [PMID: 23251860]
84. Barry KL, Blow FC, Walton MA, et al: Elder-specific brief alcohol intervention: 3-month outcomes. *Alcohol Clin Exp Res* 22: 32A, 1998. [PMID: 10894315]
85. Gurland B, Cross P: Epidemiology of psychopathology in old age: some implications for clinical services. *Psychiatr Clin North Am* 5: 11, 1982. [PMID: 6980402]
86. Adams WL, Fleming M, Barry K: Screening for problem drinking in older primary care patients. *JAMA* 276: 1964, 1996. [PMID: 8971065]
87. Robins L, Helzer J, Weissman M, et al: Lifetime prevalence of specific psychiatric disorders in three sites. *Arch Gen Psychiatry* 41: 949, 1984. [PMID: 6332590]
88. Oslin DW: Late-life alcoholism: issues relevant to the geriatric psychiatrist. *Am J Geriatr Psychiatry* 12: 571, 2004. [PMID: 15545325]
89. Beyer JL: Bipolar disorder in late life. In: Blazer DG, Steffens DC, eds. *The American Psychiatric Publishing Textbook of Geriatric Psychiatry*, 4th ed. Arlington, VA: American Psychiatric Publishing; 2009.
90. Shulman RW, Marton P, Fisher A, Cohen C: Characteristics of psychogeriatric patient visits to a general hospital emergency room. *Can J Psychiatry* 41: 175, 1996. [PMID: 8722647]
91. Depp CA, Jeste DV: Bipolar disorder in older adults: a critical review. *Bipolar Disord* 6: 343, 2004. [PMID: 15383127]
92. Shulman KI, Rochon P, Sykora K, et al: Changing prescription patterns for lithium and valproic acid in old age: shifting practice without evidence. *BMJ* 326: 960, 2003. [PMID: 12727669]
93. Umapathy C, Mulsant BH, Pollock BG: Bipolar disorder in the elderly. *Psychiatr Ann* 30: 473, 2000. [PMID: 7573178]
94. Sproule BA, Hardy BG, Shulman KI: Differential pharmacokinetics of lithium in elderly patients. *Drugs Aging* 16: 165, 2000. [PMID: 10803857]
95. Castle DJ, Murray RM: The epidemiology of late-onset schizophrenia. *Schizophr Bull* 19: 691, 1993. [PMID: 8303220]
96. Copeland JR, Dewey ME, Scott A, et al: Schizophrenia and delusional disorder in older age: community prevalence, incidence, comorbidity and outcome. *Schizophr Bull* 24: 153, 1998. [PMID: 9502553]
97. Keith SJ, Regier DA, Rae DS: Schizophrenic disorders. In: Robins LN, Regier DA, eds. *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study*. New York, NY: Free Press; 1991:33.
98. Jeste DV, Lanouette NM, Vahia IV: Schizophrenia and paranoid disorders. In: Blazer DG, Steffens DC, eds. *The American Psychiatric Publishing Textbook of Geriatric Psychiatry*, 4th ed. Arlington, VA: American Psychiatric Publishing; 2009.
99. Vahia IV, Palmer BW, Depp C, et al: Is late-onset schizophrenia a subtype of schizophrenia? *Acta Psychiatr Scand* 122: 414, 2010. [PMID: 20199491]
100. Casey DA, Rodriguez M, Northcott C, Vickar G, Shihabuddin L: Schizophrenia: medical illness, mortality, and aging. *Int J Psychiatry Med* 41: 245, 2011. [PMID: 22073763]
101. McEvoy JP, Meyer JM, Goff DC, et al: Prevalence of the metabolic syndrome in patients with schizophrenia: baseline results from the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) schizophrenia trial and comparison with national estimates from NHANES III. *Schizophr Res* 80: 19, 2005. [PMID: 16137860]
102. Jeste DV: Tardive dyskinesia in older patients. *J Clin Psychiatry* 61: 27, 2000. [PMID: 10739328]
103. Iglewicz A, Meeks TW, Jeste DV: New wine in old bottle: late-life psychosis. *Psychiatr Clin North Am* 34: 295, 2011. [PMID: 21536160]
104. Patterson TL, McKibbin C, Taylor M, et al: Functional Adaptation Skills Training (FAST): a pilot psychosocial intervention study in middle-aged and older patients with chronic psychotic disorders. *Am J Geriatr Psychiatry* 11: 17, 2003. [PMID: 12527536]
105. Patterson TL, Mausbach BT, McKibbin C, Goldman S, Bucardo J, Jeste DV: Functional Adaptation Skills Training (FAST): a randomized trial of a psychosocial intervention for middle-aged and older patients with chronic psychotic disorders. *Schizophr Res* 86: 291, 2006. [PMID: 16814526]
106. Gagne DA, Von Holle A, Brownley KA, et al: Eating disorder symptoms and weight and shape concerns in a large web-based convenience sample of women ages 50 and above: results of the gender and body image (GABI) study. *Int J Eat Disord* 45: 832, 2012. [PMID: 22729743]
107. Lapid MI, Prom MC, Burton MC, McAlpine DE, Sutor B, Rummans TA: Eating disorders in the elderly. *Int Psychogeriatr* 22: 523, 2010. [PMID: 20170590]