Our Mission: Helping to prepare Iowa’s health practitioners to care for our growing population of elders. E-NEWS is one of our methods of teaching through technology.

Each month, E-NEWS delivers abstracts from current multidisciplinary healthcare journal articles related to a specific geriatric topic. This month’s E-NEWS focuses on DISTINGUISHING DELIRIUM, DEMENTIA, AND DEPRESSION.

In addition, E-NEWS provides reviews of e-learning products from the Iowa Geriatric Education Center that train practitioners and students to provide improved care to older adults. This month’s E-Learning Focus is on GERIAFLIX.

DISTINGUISHING DELIRIUM, DEMENTIA, AND DEPRESSION

In this issue of the E-NEWS, you will find abstracts for:

- A study that reviews dementia screening tools for general practitioners to use.
- A study that assesses nurses’ knowledge of delirium superimposed on dementia using case vignettes.
- A study that examines the impact of cognitive impairment on the phenomenology of geriatric depression.
- A study that explores depressive symptoms and the risk of incident delirium in older hospitalized adults.
- An article that discusses cognitive assessment and differentiating dementia, depression, and delirium (the 3 Ds).
- A study that evaluates four different scales for detecting depression in Alzheimer's disease.
- A review of the contribution of depression to cognitive impairment and dementia in older adults.

**OBJECTIVE:** The objective of this study was to review existing dementia screening tools with a view to informing and recommending suitable instruments to general practitioners (GPs) based on their performance and practicability for general practice. **METHOD:** A systematic search of pre-MEDLINE, MEDLINE, PsycINFO, and the Cochrane Library Database was undertaken. Only available full-text articles about dementia screening instruments written in English or with an English version were included. Articles using a translation of an English language instrument were excluded unless validated in a general practice, community, or population sample. **RESULTS:** The General Practitioner Assessment of Cognition (GPCOG), Mini-Cog, and Memory Impairment Screen (MIS) were chosen as most suitable for routine dementia screening in general practice. The GPCOG, Mini-Cog, and MIS were all validated in community, population, or general practice samples, are easy to administer, and have administration times of 5 minutes or less. They also have negative predictive validity and misclassification rates, which do not differ significantly from those of the Mini-Mental Status Examination. **CONCLUSIONS:** It is recommended that GPs consider using the GPCOG, Mini-Cog, or MIS when screening for cognitive impairment or for case detection.


Delirium is a serious and prevalent problem that occurs in many hospitalized older adults. Delirium superimposed on dementia (DSD) occurs when a delirium occurs concurrently with a pre-existing dementia. DSD is typically underrecognized by medical and nursing staff. The current study measured nursing identification of DSD using standardized case vignettes, and the Mary Starke Harper Aging Knowledge Exam (MSHAKE). Results revealed that the nurses in this study had a high level of general geropsychiatric nursing knowledge as measured by the MSHAKE, yet had difficulty recognizing DSD compared to dementia alone and delirium alone. Only 21% were able to correctly identify the hypoactive form of DSD, and 41% correctly identified hypoactive delirium alone in the case vignettes. Interventions and educational programs designed to increase nursing awareness of DSD symptoms could help to decrease this gap in nursing knowledge.


**OBJECTIVE:** Dementia and depressive syndromes demonstrate substantial symptom overlap. As a result, it is challenging to differentiate depression symptoms from nonspecific symptoms of an underlying dementia syndrome. The author addressed the impact of cognitive impairment on the phenomenology of depression symptoms by determining whether more impaired patients were more likely to endorse certain self-report depressive symptoms independent of their underlying level of depression severity. **METHODS:** Author used data from 576 geriatric rehabilitation inpatients for MIMIC model analyses examining the impact of cognitive impairment on both depression severity and endorsement of symptom clusters. Depressive symptoms were measured with the Geriatric Depression Scale, and cognitive impairment was measured with the Mattis Dementia Rating Scale total score. **RESULTS:** The reliability (internal consistency) of self-reported depressive symptoms did not change as a function of cognitive impairment. More severe cognitive impairment was associated with greater depression severity but was also associated with two depression symptom clusters after controlling for underlying levels of depression severity. Patients who were more impaired endorsed greater social withdrawal and less psychomotor agitation, independent of their underlying depression severity. Level of cognitive impairment alone did not affect the endorsement of depressed mood and positive affect. **CONCLUSIONS:** Certain symptoms on depression inventories may be endorsed at a greater level by cognitively impaired patients, independent of their level of underlying depression severity. These symptoms may be nonspecific features of the underlying dementia syndrome.
and may not be specific to depressive episodes, but instead may represent other syndromes, such as apathy.


OBJECTIVES: To determine whether specific subsets of symptoms from the Geriatric Depression Scale (GDS), assessed at hospital admission, were associated with the incidence of delirium. DESIGN: Secondary analysis of a prospective cohort study of patients from the Delirium Prevention Trial. SETTING: General medicine service at Yale New Haven Hospital, March 25, 1995, through March 18, 1998. PARTICIPANTS: Four hundred sixteen patients aged 70 and older who were at intermediate or high risk for delirium and were not taking antidepressants at hospital admission. MEASUREMENTS: Depressive symptoms were assessed GDS, and daily assessments of delirium were obtained using the Confusion Assessment Method. RESULTS: Of the 416 patients in the analysis sample, 36 (8.6%) developed delirium within the first 5 days of hospitalization. Patients who developed delirium reported 5.7 depressive symptoms on average, whereas patients without delirium reported an average of 4.2 symptoms. Using a Cox proportional hazards model, it was found that depressive symptoms assessing dysphoric mood and hopelessness were predictive of incident delirium, controlling for measures of physical and mental health. In contrast, symptoms of withdrawal, apathy, and vigor were not significantly associated with delirium. CONCLUSION: These findings suggest that assessing symptoms of dysphoric mood and hopelessness could help identify patients at risk for incident delirium. Future studies should evaluate whether nonpharmacological treatment for these symptoms reduces the risk of delirium.


Differentiation between a diminished or altered cognitive functioning as a consequence of aging and one resulting from serious health problems is critical in the elderly. An unrecognized cognitive disorder or the worsening of the impairment may hamper the effectiveness and appropriateness of care and treatment; therefore, standardized assessment procedures and systematic monitoring of cognition and behavior are important aspects of the nursing care of older adults. In this article, current notions for accurate and comprehensive cognitive assessment in older persons are delineated. Further, an overview of epidemiological screening and diagnostic dilemmas of dementia, depression, and delirium are provided.


Depression is a frequent condition in Alzheimer's disease (AD). The prevalence of depressive symptoms depends on the severity of dementia and the instruments used. Our aim was to assess the prevalence of depression dependent on the severity of dementia by four different scales: The 15-point Geriatric Depression Scale (GDS), the Montgomery and Asperg Depression Scale (MADRS), the Cornell Scale for Depression in Dementia (CSDD) and the Nurses Observation Scale for Geriatric Patients (NOSGER). The study population consisted of 316 patients with Alzheimer's disease from a psychiatric out-patients memory-clinic, which was divided into two groups: mild AD (Mini-Mental Status Examination (MMSE) > or = 18) and moderate to severe AD (MMSE <18). Additionally, internal consistency and correlation of these scales were calculated. Prevalence of depression ranged between 27.5 and 53.4% in mild AD and between 36.3 and 68.4% in moderate to severe AD. Internal consistency was good in all scales (Cronbach's alpha .63-.85). For MADRS and CSDD it was independent of the stage of AD, while in GDS and NOSGER internal consistency decreased with severity of dementia. Correlation between the scales was better in mild AD than moderate to severe AD; the best results were obtained for the correlation between CSDD and
MADRS in both groups. We conclude that in our study population CSDD and MADRS were the most consistent tools for detecting depression in AD independently of the severity of dementia.

Potter GG, Steffens DC. Contribution of depression to cognitive impairment and dementia in older adults. *Neurologist.* 2007 May;13(3):105-17.

**BACKGROUND:** The objective of this review is to provide information for clinicians regarding current research and opinions on the association of depression to conditions of cognitive impairment and dementia. We also intend to integrate this current research and thinking into strategies for the assessment and treatment of depression in the context of cognitive impairment. **REVIEW SUMMARY:** Depression is highly prevalent in mild cognitive impairment and most dementias. It may be a risk factor for the subsequent development of dementia and in some conditions may be a prodromal symptom. It is important to detect and effectively treat depression because the comorbidity of depression and cognitive impairment is associated with greater cognitive and functional decline and higher rates of institutionalization. Depression often can be differentiated from Alzheimer disease and other dementias based on characteristics of clinical history and presentation. Screening of depression and cognitive impairment will help characterize the presence and severity of these conditions, but limitations in screening approaches may necessitate comprehensive assessment in complex cases where differential diagnosis is important to treatment planning. **CONCLUSION:** Although depression and cognitive impairment are important issues in the treatment of older adults, there are particular risks when they occur together. Appropriate assessment and screening can help guide the clinician to appropriate and timely interventions. Pharmacologic and nonpharmacologic treatment approaches are both efficacious in reducing depression in cognitive impairment and dementia.
E-LEARNING FOCUS: GERIAFLIX

The 2007 Geriatric Lecture Series wraps up in July, with the new series slated to begin in January 2008. In the meantime, past Geriatric Lecture Series presentations are available to view for CME/CEU credit through the Iowa Geriatric Education Center website as GeriaFlix.

GeriaFlix are multidisciplinary presentations on topics in clinical geriatrics. Each presentation, presented in a streaming digital video format with synchronized slides, lasts roughly one hour. This series of monthly lectures is devoted to topics in clinical geriatrics designed to teach important principles in the management of older persons.

GeriaFlix are intended for medical students, residents, fellows, and practicing physicians, as well as for learners in nursing, pharmacy, and other allied health disciplines. This continuing education activity is of particular value and importance to physicians and nurses who work with the geriatric patient. Over 70 presentations are available on a variety of topics, including dementia, delirium, geriatric assessment, urinary incontinence, pain, stroke prevention, and diabetes. To view system requirements, read a complete list of available topics, or try a GeriaFlix sample, visit the following web page: http://www.healthcare.uiowa.edu/igec/e-learn_lic/presentations/default.asp.

GeriaFlix are available for CME credit and nurse CEU credit for a nominal fee. The University of Iowa Carver College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. Each GeriaFlix presentation is designated for a maximum of one category 1 credit toward the AMA Physician’s Recognition Award. Each physician should claim only those credits that he or she actually spent in the activity. As for continuing education for nurses, this program is sponsored in cooperation with the University of Iowa College of Nursing, an Iowa Board of Nursing Approved Provider, number 1. Each GeriaFlix presentation will award .12 Nursing CEU credit.

To view a GeriaFlix presentation for continuing education credit, go to the following web page: http://www.healthcare.uiowa.edu/igec/e-learn_lic/presentations/cmeMenu.asp. For more information, contact the Iowa Geriatric Education Center at geriatric-education@uiowa.edu.
Next Month’s Issue:

Depression Training to Promote Nurses as Advocates for Older Adults

Why not share E-NEWS with your colleagues? Forward a copy of this issue.
Subscription information is found below.

To subscribe to E-NEWS, fill out the form on the following website:
http://www.medicine.uiowa.edu/igec/e-news/index.asp

To unsubscribe to E-NEWS, fill out the form on the following website:
http://www.medicine.uiowa.edu/igec/e-news/unsubscribe.asp