

Use of Benzodiazepine Drugs Has Declined Among Older Adults

In older adults, benzodiazepine agents double the risk of car crashes, falls, and broken hips, and are on the international list of drugs that few individuals older than 65 should take. However, a sizable percentage of older adults still have active prescriptions for these medications, showing that more needs to be done to alert providers, patients, and families to their hazards and the need to find alternative treatments. Research published in the *Journal of the American Geriatrics Society* examined data from older adults treated in three different health care systems between 2010 and 2016: the U.S. Veterans Affairs; Ontario, Canada; and Australia.

The percentage of U.S. Veterans older than 65 prescribed a benzodiazepine drug decreased from 9.2% in 2010 to 7.3% in 2016, and the percentage newly started on a benzodiazepine drug decreased from 2.6% to 1.7% over the same time period. In Ontario, 18.2% of older adults had a current prescription in 2010, declining to 13.4% in 2016; likewise, those who started a new prescription each year reduced from 6% to 4%. The percentage of Australian older adults with a benzodiazepine prescription decreased from 20.2% in 2010 to 16.8% in 2016; the number of first-time prescriptions decreased from 7% to 6.7%.

Source. "Progress, but Far from Perfection, on Avoiding Risky Sedatives in Older Adults" (2018, February 12). Retrieved March 27, 2018, from <https://bit.ly/2upBGA4>.

Couples' Intervention May Help Communication Between Caregiver and Partner With Dementia

A study using a 10-week in-home intervention to support couples affected by dementia showed improved communication between the caregiver and care recipient. The study, published in the *International Journal of Geriatric Psychiatry*, was designed to increase facilitative communication in the caregiver and sociable communication in the care recipient. In addition, the intervention was designed to reduce disabling behavior (e.g., criticizing, quizzing partner's memory) in caregivers and unsociable behavior (e.g., not making eye contact) in care recipients.

At the start of the intervention, couples received a manual with 10 weekly modules on various communication issues. Researchers met weekly with the care recipient and caregiver separately, followed by a meeting with the couple together. At the end of each session, couples were asked to converse unobserved for approximately 10 minutes on a topic of their choice, which was videotaped by researchers. Researchers used a rating scale to measure outcomes of the intervention and analyzed and scored 118 10-minute videos of each couple's sessions.

Throughout the intervention, researchers assessed caregivers' learning needs and provided information about communication and communication strategies, incorporating role-play when needed. Caregivers were coached to identify their communication style and that of their partner. Researchers encouraged care recipients to verbally express their thoughts, feelings, preferences, and needs.

The study found that care recipients, who had moderate dementia, had statistically significant improvements in their verbal and non-verbal communication. In addition, caregivers also showed statistically significant increases in facilitative communication and decreases in disabling communication.

Source. "Innovative Couples' Intervention Significantly Helps People With Alzheimer's Communicate" (2018, February 21). Retrieved March 27, 2018, from <https://bit.ly/219mhpz>.



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Risk of Dementia May Be Higher in Adults with Congenital Heart Disease

A study of more than 10,000 adults with congenital heart disease

(CHD) in Denmark discovered a particularly increased risk for early dementia in middle-aged adults. The study, published online in *Circulation*, examined 10,632 adults born between 1890 and 1982. Researchers

used medical registries and a medical records review covering all Danish hospitals to identify adults with CHD diagnosed between 1963 and 2012. Researchers found a 60% increased risk of dementia in individuals with CHD compared to the general population. The risk was 160% higher when comparing individuals younger than 65.

Source. "Study Shows Higher Risk of Dementia for Adults with Congenital Heart Disease" (2018, February 20). Retrieved March 27, 2018, from <https://prn.to/2pLAIsh>.

Long-Term Acute Care Facilities May Be Used for Reasons Other Than Severity of Illness

Long-term acute care (LTAC) facilities are designed to meet the needs of older adults with severe, complex illnesses who are recovering from hospitalization, but less expensive options are available that may be overlooked. Only approximately one half of older adults are transferred to LTAC facilities for reasons related to severity or complexity of their illnesses. For the other one half, hospital preferences and regional trends often influence whether more cost-effective options are chosen, according to population health researchers in UT Southwestern Patient-Centered Outcomes Research.

The study, published in *JAMA Internal Medicine*, was based on national Medicare data from 2010 to 2012. It also showed that certain regions of the country have higher rates of LTAC facility use, suggesting overuse in the South, and possibly underuse in the Pacific Northwest, North, and North Northeast. These differences are in part due to differences in LTAC availability.

Source. "Less Expensive, Post-Acute Care Options for Seniors Underutilized" (2018, February 22). Retrieved March 27, 2018, from <https://bit.ly/2GsgEWv>.

High Resolution Imaging Can Show Underlying Causes of Memory Loss in Older Adults

High resolution functional magnetic resonance imaging (fMRI) of the brain can be used to show underlying causes of differences in memory proficiency between older and younger adults, according to a study led by University of California, Irvine researchers and published in *Neuron*. The study involved 20 young adults (ages 18 to 31) and 20 cognitively healthy older adults (ages 64 to 89). Participants were asked to perform two kinds of tasks while undergoing fMRI scanning, an object memory and location memory task, allowing researchers to determine which parts of the brain participants were using for each activity.



In the first task, participants viewed images of everyday objects and were asked to distinguish them from new images. Some new images were identical to the previous ones, some were brand new, and others were similar, but may have changed in color or size. Older adults were much more likely than younger adults to think they had seen the similar images before.

The second task required participants to determine whether the location of objects had been altered. The older adults fared much better in this task than the previous task, suggesting that not all memory changes equally with aging, and that object memory is more vulnerable than spatial, or location, memory. By scanning participants' brains while they underwent tests, researchers were able to determine that deficit in object memory was linked to a loss of signaling in the anterolateral entorhinal cortex of the brain. In contrast, researchers did not find age-related differences in the posteromedial entorhinal cortex, another area of the brain connected to memory.

Source. "High-Resolution Brain Imaging Provides Clues About Memory Loss in Older Adults" (2018, March 7). Retrieved March 28, 2018, from <https://bit.ly/2DZLfoY>.

Physicians and Older Patients Often Disagree on Treatment Plans

According to findings from the National Poll on Healthy Aging, physicians and older patients may disagree more often than either suspects about whether a medical test or medicine is necessary. The poll was conducted in a nationally representative sample of 2,007 American adults ages 50 to 80 by the University of Michigan Institute for Healthcare Policy and Innovation.

According to the poll, one in four patients say their health providers often order tests or prescribe drugs that they do not think they need. One in six said it had happened in the past 1 year, but approximately one half of those polled followed through with the test or filled the prescription anyway. On the other hand, approximately one in 10 polled said their physician or other health provider had told them that a test or medication they had asked for was not needed. Most said the provider explained why, but 40%

did not completely understand the explanation.

Source. "More Isn't Always Better When It Comes to Health Care, Older Americans Say—But Many See Mismatch in Need & Use" (23, February 2018). Retrieved March 27, 2018, from <https://bit.ly/216qeva>.

Older Adults May Be Uniquely Susceptible to Toxicity in Drugs

Older adults may have increased and unique susceptibilities to adverse effects of drugs and environmental toxicants and may have concomitant diseases, requiring many pharmaceuticals. Changes in physiology due to age may alter the body's ability to eliminate toxins, or increase its susceptibility to their adverse effects. In addition, older adults tend to develop more chronic diseases, thus requiring more drugs. However, toxicity and effects of drugs (singly or in combination) in older individuals may not be fully realized. For example, toxicities usually are determined only for individual drugs; toxicity may result from physiological changes that are not predictable based on findings with single agents; and drugs intended to treat chronic conditions may not have been studied in models adequate to assess potential age-related adverse effects.

Source. "Toxicological Concerns in Older Adults, a Neglected Majority" (2018, March 1). Retrieved March 28, 2018, from <https://bit.ly/2GfblkJ>.

Dexmedetomidine May Prevent Delirium in Patients in the Intensive Care Unit

A low dose of the sedative dexmedetomidine given at night may prevent delirium in critically ill patients, according to research published online in the *American*

Physicians and Nurses Focus on Different Aspects of Patient Care

A study conducted at the University of Chicago and published in the *International Journal of Medical Informatics* leveraged computer science technology to compare patient care provided by nurses and physicians using information routinely documented in the electronic health record (EHR).



Researchers analyzed EHRs of 58 randomly selected patients who had a medical diagnosis of heart failure and sought care at a single academic medical center over the course of 8 years. Each health record included a physician discharge summary, and nursing plans of care were created for the study using information found in the discharge report. A computer algorithm was used to identify the key biomedical terms used in each summary and link synonyms or related terms.

Researchers found that only 26% of patient records showed an overlap in terms. On average, only four terms between the professions were related to the same concept. Physicians and nurses used approximately 27 and 18 terms, respectively. Common terms for physicians were highly technical, such as "decreased translucency" and "radiographic examination abnormal," whereas nursing terms were more likely to focus on symptoms and responses to illness, such as "acute onset of pain," showing that physicians and nurses tend to focus on different aspects of care. This finding may indicate that there is a need for detailed nursing documentation, along with physician documentation, to accurately reflect care and patients' experiences.

Source. "Algorithm Shows Differences Between Nurse, Doctor Care" (2018, March 7). Retrieved March 28, 2018, from <https://bit.ly/2GldAb5>.

Journal of Respiratory and Critical Care Medicine. The study enrolled 100 intensive care unit (ICU) patients at two hospitals, one in Quebec and the other in Boston. Patients did not have delirium at the time of ICU enrollment. One half of patients were randomly assigned to receive intravenous dexmedetomidine; the other one half were infused with placebo. Neither the patients nor the ICU health care team knew which arm of the trial patients were in.

The study found that compared to the placebo arm, those receiving dex-

medetomidine were more likely to remain free of delirium throughout their ICU stay (80% compared to 54%); spent more days free of delirium in the ICU (8 days compared to 6 days); and were less likely, if in pain, to experience severe pain (44% compared to 66%).

Source. "Sedative May Prevent Delirium in the ICU" (2018, February 27). Retrieved March 27, 2018, from <https://bit.ly/2urcU2w>.

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