Researchers to Test New Approach to Help Grandmothers Manage Stress of Caring for Grandchildren Full-Time

As the number of grandparents caring for grandchildren full-time continues to increase, so do the stress-induced health risks associated with such a demanding responsibility. Now, a 4-year, $2 million grant from the National Institutes of Health will allow researchers at Case Western Reserve University’s Frances Payne Bolton School of Nursing to refine and test a new approach to help grandmothers manage the stresses of this new role, and hopefully reduce the emotional and physical fallout that often results.

In the study, grandmother caregivers will participate in a web-based program designed especially for their unique needs to improve coping skills to manage stressful situations. With a national sample of more than 300 grandmothers, researchers will randomly assign participants to one of two different approaches to managing individual and family stress. General mental health and depressive symptoms, physical health, and family functioning will be measured at 2, 12, and 24 months. The study will also determine if family demographics—age, race, education, marital status, employment status, family income, and number of grandchildren—and caregiving status or family demands affect the outcomes.


Mentally Stimulating Activities May Protect Against Mild Cognitive Impairment

A new study in *JAMA Neurology* found that engaging in mentally stimulating activities, even late in life, may protect against new-onset mild cognitive impairment (MCI).

Researchers followed 1,929 cognitively normal participants of the population-based Mayo Clinic Study of Aging in Olmsted County, Minnesota, for an average of 4 years. Neurocognitive assessments were conducted at the time of enrollment, with evaluations every 15 months. Following assessment, an expert consensus panel at the Alzheimer Disease Research Center at Mayo Clinic made the classification of normal cognition or MCI for each participant, based on published criteria.

After adjusting for sex, age, and education level, they found that the risk of new-onset MCI decreased by 30% with computer use, 28% with craft activities, 23% with social activities, and 22% with playing games.


Blood Test May Be as Accurate as Spinal Fluid Test for Parkinson’s Disease

A simple blood test may be as accurate as a spinal fluid test when trying to determine whether symptoms are caused by Parkinson’s disease or another atypical parkinsonism disorder, according to a new study in *Neurology*.

Researchers examined 504 individuals from three study groups. Two groups (one in England and one in Sweden) had healthy individuals and those with Parkinson’s disease or atypical parkinsonism disorders (APDs) for an average of 4 to 6 years. The third group comprised individuals who had the diseases for ≤3 years. There were 244 total participants with Parkinson’s disease, 88 with multiple system atrophy, 70 with progressive supranuclear palsy, 23 with corticobasal degeneration, and 79 who served as healthy controls.

Findings showed the blood test was just as accurate as a spinal fluid test at diagnosing whether an
individual had Parkinson’s disease or an APD, in both early and late stages of disease. Nerve protein levels were higher in individuals with APDs and lower in those with Parkinson’s disease and who were healthy. In the Swedish group, protein levels averaged approximately 10 pg/mL. Individuals with multiple system atrophy had levels averaging approximately 20 pg/mL, those with progressive supranuclear palsy averaged approximately 25 pg/mL, and those with corticobasal degeneration averaged approximately 27 pg/mL. In the Swedish group, the blood test had a sensitivity of 82% and a specificity of 91%. For individuals in the early stages of disease, sensitivity was 70% and specificity was 80%.

One limitation of nerve protein testing is that it does not distinguish between different APDs, but physicians can look for other symptoms and signs to distinguish between disorders.


“Living Apart Together” Trend Gaining Popularity in Older Adults

Since 1990, the divorce rate among adults 50 and older has doubled. This trend, along with longer life expectancy, has resulted in many adults forming new partnerships later in life. A new phenomenon called “Living Apart Together” (LAT)—an intimate relationship without a shared residence—is gaining popularity as an alternative form of commitment. Researchers claim the trend is well understood in Europe, but is lesser known in the United States, which means challenges such as how LAT partners can engage in family caregiving or decision making could affect family needs.

Researchers interviewed adults who were at least age 60 and in committed relationships but lived apart. They found that couples were motivated by desires to stay independent, maintain their own homes, sustain existing family boundaries, and remain financially independent. Couples expressed challenges defining their relationships or choosing terms to properly convey the nature of their relationships to others. For example, most individuals considered traditional dating terms such as “boyfriend” or “girlfriend” and the like inappropriate for their situation.

Ongoing Screening Needed for Family Caregivers to Prevent Depression and Anxiety

Currently, more than 34 million individuals in the United States care for terminally ill loved ones, but few resources are available to help them navigate the challenges they encounter. A study at the University of Missouri School of Medicine found that approximately one quarter of caregivers were moderately or severely depressed and approximately one third had moderate or severe anxiety.

Researchers conducted depression and anxiety assessments with 395 family caregivers. They found that 23% of caregivers were moderately or severely depressed, and 33% of caregivers had moderate or severe anxiety. In addition, they identified several risk factors associated with depression and anxiety among caregivers.

Researchers noted that these simple assessments are not used because of the misconceived notion among health providers that family caregivers are not their patients. However, assessment tools for depression and anxiety are widely affordable and have the potential for improved clinical outcomes for family caregivers in need of additional support. The researchers recommend that health providers remember to treat the whole family, providing ongoing screening to family caregivers to identify early signs of depression and anxiety.

and “girlfriend” to be awkward to use at their age.

Researchers are now seeking older adults from around the country in committed, monogamous relationships who are choosing to live apart (in a LAT relationship) or living together unmarried (cohabiting) for further study.


Opioid Drugs and Alcohol Increase Risk of Respiratory Depression in Older Adults

Taking one oxycodone tablet together with even a modest amount of alcohol increases the risk of a potentially life-threatening side effect known as respiratory depression, which causes breathing to become extremely shallow or stop altogether, according to a new study in Anesthesiology. The study found that older adults were especially likely to experience this complication.

Researchers examined the effect taking oxycodone in combination with alcohol had on breathing in 12 healthy young volunteers (ages 21 to 28) and 12 older adult volunteers (ages 66 to 77), who had not been chronically taking or who had never taken opioid drugs. On three separate occasions, volunteers were given one 20 mg oxycodone tablet combined with an intravenous infusion of ethanol (alcohol). To allow researchers to continuously evaluate participants’ safety, the amount of ethanol was increased with each visit—from placebo on the first visit to concentrations of 0.5 g/L (approximately one drink in women and three drinks in men) during the second visit and 1 g/L (approximately three drinks in women and five drinks in men) during the third visit as measured through their breath. Baseline respiratory measurements were taken before drugs were administered. Resting respiratory variables, minute ventilation, and the number of times volunteers temporarily stopped breathing were obtained at regular intervals during treatment.

One oxycodone tablet reduced baseline minute ventilation by 28%, whereas the addition of 1 g/L of ethanol caused minute ventilation to further decrease by another 19% (47% total). The combination of ethanol with oxycodone caused a significant increase in the number of times volunteers experienced a temporary cessation in breathing—ranging from 0 to three events with no ethanol versus 0 to 11 events at 1 g/L of ethanol (measured by breath). Overall, researchers found a synergistic effect between opioid drugs and alcohol on breathing, and on the number of times an individual temporarily stopped breathing. This finding was especially true in the older adult population, who were more likely to experience repeated episodes where they temporarily stopped breathing.


American Older Adults Using More Brain-Affecting Drugs

The number of older Americans who take three or more medicines that affect their brains has more than doubled in one decade, according to a new study in JAMA Internal Medicine. Researchers analyzed data collected from a representative sample of physicians’ offices between 2004 and 2013 by the Centers for Disease Control and Prevention.

The sharpest rise occurred in older adults living in rural areas, where the rate of physician visits for older adults taking combinations of such drugs more than tripled. Although only 0.6% of physician visits for older adults involved three or more central nervous system (CNS)—affecting drugs in 2004, the rate increased to 1.4% in 2013. If that percentage is applied to the entire U.S. older adult population, that means 3.68 million physician visits per year involve older adults taking three or more CNS drugs.