Tips For Aging Well*

Want to live a superlong life? Choose your parents well. Want to be healthy until the day you die? Laugh more, get some sleep, and get a tetanus shot. “Longevity has a strong genetic component, but how healthy you are as you age is largely up to you,” says Harvey Jay Cohen, MD, director of the Center for the Study of Aging and Human Development. “Most of us want to be healthy until the end, not live to 100 and be a decrepit wreck.”

**Join a laughter club.** Numerous studies have shown that laughter can reduce stress, improve your immune system, even relieve pain. The findings have prompted the proliferation of “laughter clubs” around the glove. Participants, many of them with chronic illnesses, gather together to laugh and do breathing exercises. “Laughter is a way of coping and dealing with difficult situations. It has real benefits on a clinical level,” Cohen says.

**Turn in Early.** People 50 or older who get six to nine hours of sleep a night think better than those who get fewer hours, according to a new study in the Journal of Clinical Sleep Medicine. Sleep seems to strengthen the connections between brain cells, helping older adults process information more readily. And researchers at University Hospital Case Medical Center in Cleveland found that poor sleepers show signs of premature skin aging, including fine line, uneven skin tone and reduced elasticity. “Sleep seems to help our bodies repair all the things that might have gone wrong during the day,” Cohen says.

**Opt for screenings over wellness exams.** “A yearly physical per se has not been demonstrated to be all that helpful” in preventing disease, Cohen points out. A better bet: Get specific screenings for heart disease, and breast and colon cancers, as well as vaccines for flu and shingles. “Plus, check to see if your tetanus vaccine is up-to-date,” he adds. “It has a long duration of effectiveness, but if you live a long time, you might exceed this.”

---

early 30 years ago, my mentor, Bernice Neugarten, made one comment repeatedly: “If you want to continue in aging, you MUST go to Duke,” she intoned. Near the end of the dissertation process, I applied to the Duke Aging Center Postdoctoral Research Training Program, always intending to be in Durham for those two years and then return to Chicago. Somehow, that never happened!

Some say the weather kept me here; others believe it is the more sedate pace of life. But the truth is that I remained in Durham and at Duke because of one thing: The Duke Center for the Study of Aging and Human Development. The colleagues and potential collaborators associated with the Aging Center are the best in the world. In addition, a teacher for many years, I wanted to continue at some level. Coordinating the Aging Center Postdoc Program and directing the undergraduate Human Development Certificate allowed me to teach while doing research. And although my aging interests predated my becoming a Senior Fellow in the Aging Center, the Duke Aging Center and its research was what enticed me to stay.

I arrived here after writing a dissertation on sibling relationships in late life and expected to continue that work. I did so, replicating my original study with an African-American sample and working with Max Woodbury to combine qualitative and quantitative analyses (Grade of Membership or GOM analysis) to see if there were identifiable types of sibling relationships. In fact, 5 of my first 7 publications focused on this topic. But then an unexpected opportunity arose, and I followed a path that emphasized understanding the impact of chronic disease on older people’s biopsychosocial functioning.

This opportunity came from a program designed to diagnose and treat osteoporosis. At that point in chronological time, little was known about the disease and less about managing it. Physicians, physical therapists, and nutritionists worked with osteoporosis patients to improve their quality of life. At that time, no medication except estrogen was available to treat this devastating bone disease. Their work and the suffering of the women they saw fascinated me and the literature made clear that no research was focused on the non-skeletal outcomes of fractures. Since that time, I have done research on Parkinson’s disease, several types of cancer, Paget’s disease, syncope, dementia and even sickle cell disease, but my intellectual curiosity and commitment have remained focused on osteoporosis.

Continued on page 3
EDITORIAL*

Congratulations Medicare!

Congratulations to Medicare for surviving another year despite multiple attacks and dire warnings about its imminent demise. We have seen a small industry develop, issuing alarms about the federal budget and how Medicare must be cut or privatized for our government to survive the onslaught of the Boomer Generation.

These warnings were based on the historical facts that health care spending has risen much faster than GDP, and it has been assumed that this trend would continue. But a funny thing happened on the way to 2014: Health care spending has slowed sharply, and it is already well below projections made a few years ago. The reductions have been especially sharp in Medicare, which is spending $1,000 less per beneficiary than the Congressional Budget Office projected just four years ago. Paul Krugman, of the NY Times, has called this reduction “The Medicare Miracle.”

This is great news for several reasons:

• Our fiscal crisis has been postponed. The federal deficit is way down. It may swell in a few years because of the increase in boomers retiring. This will probably require raising more revenue eventually, but the fiscal gap is looking more manageable than the alarmist would have you believe.

• The slowdown in Medicare costs refutes the theory that the decline in health care costs is the product of a depressed economy. Medicare is a government program which should not be affected by the recession.

• It shows that the cost saving measures included in Medicare and the Affordable Care Act are actually working.

So here’s a toast to Medicare – Long May It Live!

* The opinions in this editorial are those of the editor and do not necessarily reflect policy of the Center on Aging.

FEATURED RESEARCHER: Deborah T. Gold, PhD, continued

My research began with a small study to determine whether having a mental health professional on the osteoporosis team would improve outcomes including pain, depression, and emotional functioning. The data supported this hypothesis, and this and several other smaller projects led to a larger investigation of ways in which older women with osteoporosis could have improved quality of life through a multidisciplinary intervention of exercise and coping skills. Our longitudinal study showed that initial changes in psychological symptoms and back strength were positive, while longitudinally, only the psychological changes remained positive.

Interestingly, in the early years of this clinical trial, the first pharmacological treatment specifically for osteoporosis was released, changing the paradigm of care to include medication. Although my interests in quality of life and osteoporosis continued, I was intrigued by the sudden rush of medication interventions for bone health. Within a decade and a half, the FDA had approved 9 osteoporosis medications with differing effectiveness, delivery systems, and dosing intervals. I was fascinated by the fact that, despite this menu of options, osteoporosis patients had extraordinarily poor compliance and persistence with these medications. For the last 8 years, I have tried to identify why this is true while also evaluating interventions that might improve medication behaviors in osteoporosis patients.

My research and reading of the literature on aging has taught me much about how older people interact with their environments, especially those with chronic illness. The common stereotypes of older adults as depressed, senile, weak and helpless have been debunked by research that began with the Duke Longitudinal Studies in 1955 and has continued until now. The Duke Aging Center has led the nation in understanding the biopsychosocial issues related to aging and will continue to do so long after I have retired. It has been an honor to have spent my academic career there.

By the way, Neugarten was right. The Duke Aging Center is the place to go for research on aging.
Dozens of Center faculty and fellows presented their research at the annual scientific meeting of the Gerontological Society of America in Washington, DC, November 5-9, 2014. The theme was “Making Connections: From Cells to Societies.”

D. Belsky presented a paper on is chronic asthma associated with shorter leukocyte telomere length at midlife?

CONCLUSION: life-course-persistent asthma is related to a proposed biomarker of accelerated aging, possibly via systemic eosinophilic inflammation. Life histories of asthma can inform studies of aging.

D. Belsky also presented a paper on polygenic risk for common chronic health conditions and the pace of aging at midlife.

CONCLUSION: results suggest novel applications of genetic information in studies of aging.

M. Brasher, Y. Zeng, L.K. George, Z. Yin, and X. Shi presented a paper on incorporating biomarkers into the study of socioeconomic status and health among older adults in China. We find a negative relationship between SES and health as measured by biomarkers — high SES is associated with worse health. We find a positive relationship — high SES associated with better health — for our self-reports of overall health. These findings confirm previous studies that show SES and CVD have a positive association earlier in economic development due to lifestyle.

Choy-Lye Chei, Prassanna Raman, Zhao-Xue Yin, Xiao-Ming Shi, Yi Zeng, and David Matchar presented a poster on prevalence and risk factors of atrial fibrillation in Chinese elderly: results from the Chinese longitudinal healthy longevity survey. They found that advanced age (85-94 years), history of stroke or heart disease, low triglyceride levels, and no regular physical activity were associated with AF. In urban elderly, AF prevalence increased with age (p<0.05). And in rural elderly, women had higher AF prevalence.

H.J. Cohen presented a paper on clinical geriatrics issues in the US: overview and examples. Ultimately the goal for the treatment of chronic diseases in older people is to optimize the individual’s functional status. This involves not only astute medical management but...
careful assessment of the patient’s goals of care.

C.M. Germain and colleagues presented a paper on race and ethnic differences in mortality by physical activity level.

CONCLUSION: the risk of all-cause mortality was decreased only in physically active African American males and those with insufficient physical activity.

C.C. Hendrix, D. Bailey, K. Steinhauser, M. Olsen, and J. Tulsky presented a paper on effects of enhanced caregiver training program on cancer caregiver’s self-efficacy, preparedness, and psychological well-being. No long-term effect was noted after the intervention.

L.K. Hill, A. Gamaldo, A. Aiken-Morgan, J.C. Allaire, R. Thorpe, C.L. Edwards and K.E. Whitfield presented a paper on the 3-year change in depression symptoms and perceived stress predicts sleep quality in older african americans: the baltimore study of black aging. They concluded that emotional and mental health is critical for sleep quality in older african americans.

L.K. Hill, B. Jamerson, A. Aiken-Morgan, C.L. Edwards, and K.E. Whitfield presented a paper on does stress impact the relationship between risk factors and vascular function? They concluded that stress is an additive factor in vascular disease risk.

C. Hybels, J.M. Bennett, L.R. Landerman, J. Liang, B.L. Plassman, and B. Wu presented a paper on trajectories of depressive symptoms and oral preparedness being positively related to caregiver self-esteem, yet negatively related to impact on caregiver schedule. Moderation analyses revealed that the older an employed caregiver was, the greater their reported impact on their schedule, and the greater their reported impact on their finances compared to younger not working caregivers.
The Geriatrics Division had a strong showing at the inaugural Duke Academy for Health Professions Education and Academic Development (Duke AHEAD) Celebration of Education Event held November 13-14, 2014. Duke AHEAD’s mission is “to promote excellence in the education of health professionals by creating a community of education scholars, fostering innovation in health professions education, supporting outstanding teachers, providing faculty development programs, and facilitating quality education research” (see medschool.duke.edu/faculty/duke-ahead for more information).

At this event, two educational grant proposals from our Geriatric Division were selected for funding after a competitive selection process: “Chief Resident Immersion Training (CRIT) in the Care of Older Adults” and “Education Skills Mentoring Program (ESMP).” CRIT, with Co-Principals Heidi White, MD, MHS, MEd, CMD, and Sandhya Lagoo-Deenadayalan, MD, PhD (General Surgery), aims to foster collaboration among Chief Residents of different disciplines in the management of complex older adult patients. Key collaborators for this project include John Migaly, MD (General Surgery), Kerri Wahl, MD (Anesthesiology), Sandro Pinheiro, PhD, Mitch Heflin, MD, MHS, Mamata Yanamadala, MD, Yvonne Spurney, RN (Duke Hospital), and Cristina Hendrix, RN (School of Nursing). ESMP, lead by PI Sandro Pinheiro, PhD, aims to extend the work of the GME Mini-Fellowships across health professions at Duke. Key collaborators include Harvey Cohen, MD, Mitchell Heflin, MD, MHS, Katja Elbert-Avila, MD, Heidi White, Gwen Buhr, MD, MHS, MEd, CMD, Mamata Yanamadala, Loren Wilkerson, MD, Lisa Day, PhD, RN (Duke School of Nursing), Patricia Dieter, MPA, PA-C (Duke Physician Assistant Program), and Kathy Shipp, PT, PhD (Physical Therapy Program). In addition, the poster session during this event featured the educational research of Loren Wilkerson and Mitch Heflin, with their poster entitled “An Educational Intervention to Improve Internal Medicine Interns’ Awareness of Hazards of Hospitalization in Acutely Ill Older Adults.”

---

The Education Corner is a new column dedicated to showcasing the research and educational projects Aging Center Faculty are involved in.

By Loren Wilkerson, MD

---

Most inanimate things can wear out, but most parts of our body do not literally “wear out”. Teeth are the only organs that “wear out” in the dictionary sense of “to make useless by long or hard usage.” Most of the rest of our body normally can repair itself. Of course, disease and trauma can interfere with this ability to self-repair — at any age. Also physical function can decline from atrophy and lack of use at any age. The old adage, “Use it or lose it,” is especially relevant for old age.

*Adapted from Palmore, Older Can Be Bolder (Amazon, 2011).
Palliative and Cancer Care Team Up*

Duke Medicine has developed a new collaborative model for cancer care that reduces readmission rates among patients.

The model was presented by Anthony Galanos, MD, senior fellow of the Center on Aging, and Richard Riedel, MD, oncologist, at the 2014 Palliative Care in Oncology Symposium sponsored by the American Society of Clinical Oncology in Boston. The collaborative model — which facilitates communication between medical oncologists and palliative care physicians — has been employed here since 2011. In the past three years, the model has shown promising statistics in reducing the rate of readmission after discharge and the number of patients transferred to intensive care, as well as improving satisfaction scores.

Under the old procedures, the palliative care doctor was disconnected from the patient’s condition. Now the oncologist and palliative care specialist co-round and work together on the same team and floor, and meet three times daily to discuss all of the patients.

“Our satisfaction scores have gone way up for that unit of the hospital,” Galanos said. “As far as I can tell it is a win-win proposition, and the patients and their families are being served better than before.”


Yanamadala Appointed Associate Program Director

Mamata Yanamadala, MD, has assumed the role of Associate Program Director for the Geriatrics Fellowship Program. Mitch Heflin, MD, made the announcement saying, “Mamata has provided invaluable contributions to the program over the years with her clinical and didactic teaching and is routinely cited as the faculty member who provides the “best feedback.” She has also contributed expert instruction in clinical teaching skills through her “Teaching Skills Workshop” and in working with Gwen on design and delivery of fellows education on Quality Improvement. Mamata’s broader efforts include faculty development in QI and work on a Hartford funded project to improve documentation and clinical care protocols for the POSH program. As APD, she will work with me and other key faculty to further refine our curriculum and evaluation process in the era of competency-based education.”
James (Jim) White, PhD, earned his PhD in the area of skeletal muscle biology at the University of South Carolina working in the laboratory of Dr. James Carson. In his dissertation, “Skeletal muscle protein turnover in a mouse model of cancer cachexia”, Dr. White elucidated mechanisms of muscle wasting during cancer while using therapies such as exercise and anti inflammatory agents to preserve muscle mass and function. After graduation, Jim took a postdoctoral fellowship at Harvard Medical School under the mentorship of Dr. Bruce Spiegelman. At HMS, Jim continued to explore how both exercise and disease affects skeletal muscle. His work was supported by a postdoctoral fellowship from the American Cancer Society. To further his training in skeletal muscle biology in the context of aging, Dr. White came to the Duke Aging Center to work with Dr. William Kraus in the Duke Molecular Physiology Institute. Here Jim will explore the effect of aging of muscle stem cell function and regenerative capacity. His research at Duke is sponsored by Glaxo-Smith-Kline and we are most appreciative of their continued support.

Welcome New Post-Doctoral Fellow

James (Jim) White, PhD

After having worked in the Aging Center since 1987, Diane Parham, Grants and Contracts Manager, has announced that she will retire. Her last day will be January 9, 2015. We cannot put into words our deep appreciation for her dedication to the Center and her tremendous work ethic. We are greatly saddened to see her leave but are also happy that she now will have time to relax, visit interesting places, and enjoy a life without deadlines. She has certainly earned it and we hope she will enjoy it.

RETIREMENT ANNOUNCEMENT
COMING EVENTS


April 15-18, 2015: Annual Meeting of the Southern Gerontological Society at Williamsburg, VA. Contact: Furguson at (866) 920-4660.


May 19-22, 2015: Inaugural Conference of North American Network of Aging Studies (NANAS) at Miami University, Oxford, OH. Contact: www.agingstudies.org/NANAS.