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Co-sponsors of the twenty-fifth annual
Southeastern Student Mentoring Conference in Gerontology and Geriatrics

Armstrong Atlantic State University
College of Health Sciences
Savannah, GA

Georgia State University
Gerontology Institute
Atlanta, GA

Mercer University
Georgia Neurosurgical Institute
Macon, GA

Savannah State University
Department of Social Work
Savannah, GA

University of Alabama
Center for Mental Health and Aging
Tuscaloosa, AL

University of Georgia
Institute of Gerontology
College of Public Health
Athens, GA

University of Kentucky
Graduate Center for Gerontology
Lexington, KY
Welcome

For 25 years, this conference has provided the only dedicated venue for students and faculty from across the southeastern United States to share their passion for gerontology and geriatrics. That passion ranges over a wide variety of academic disciplines and personal interests, bringing faculty and students together for productive collaboration.

As you know, there is a mentoring component to the conference that runs the gamut from partnering in research, to generating abstracts and posters, to preparing presentations for a room full of interested colleagues. We hope you sought out conversation with the mentors in your presence during the conference.

The invited program included two student keynote addresses and a presentation by Dr. Donald Ingram Professor of Nutritional Neuroscience and Aging at the Pennington Biomedical Research Center, Louisiana State University System. At the heart of the conference are the research presentations; presentation abstracts can be found in this monograph.

In celebration of our silver anniversary, we added two special features: a short history of this conference by its founder, Dr. Leonard Poon, and a panel discussion on the future of gerontology at Saturday’s luncheon.

On behalf of all of this year’s partner institutions, I hope that you enjoy this monograph.

Toni P. Miles, MD, PhD
Institute of Gerontology
College of Public Health
University of Georgia
Conference Speakers

Donald Ingram, Louisiana State University Health Science Center

Dr. Ingram holds an academic appointment as Professor and Chief of the Nutritional Neuroscience and Aging Laboratory at the world-renown Pennington Biomedical Research Center in Baton Rouge, Louisiana, which is a component of the Louisiana State University System (LSU). Prior to this position, Dr. Ingram served as Chief of the Laboratory of Experimental Gerontology at the National Institute on Aging, National Institutes of Health, in Baltimore, Maryland. He received his B.A. in psychology from LSU in 1970 and his doctorate in psychology and gerontology from the University of Georgia in 1978 followed in 1979 by a Postdoctoral Fellowship at the Jackson Laboratory, Maine, before joining the National Institute on Aging in 1980. In 2012, Dr. Ingram was also appointed as Professor (part-time) within the Geriatrics Section, Department of Internal Medicine, LSU Health Science Center, New Orleans. With over 350 scientific publications to his credit, Dr. Ingram has conducted pioneering research focused on nutritional and pharmacological interventions designed to attenuate aging, age-related disease, and functional decline. His research has produced patented drugs for treating Alzheimer’s disease. His lab is investigating the development of calorie restriction mimetics, a new research area the objective of which is to identify compounds that mimic effects of calorie restriction by targeting metabolic and stress response pathways affected, but without actually restricting caloric intake. Most recently, he has begun extensive studies on the health benefits of whole foods, particularly berry fruits, and is involved in several clinical studies investigating whole foods and food supplements on physical and cognitive health. Dr. Ingram serves on editorial boards of several biomedical journals, including the Journals of Gerontology, is the past editor of Gerontology, and is currently Editor-in-Chief of the Journal of the American Aging Association. He is a Past President of the American Aging Association (1999) and the Gerontological Society of America (2011). He also serves as a scientific advisor to several nutritional and pharmaceutical companies, and his various honors include the 1978 Zimmer Award from the Department of Psychology, UGA; a 1996 Merit Award from the National Institutes of Health; the 2002 Harman Research Award from the American Aging Association, and the 2013 Distinguished Graduate Alumni Award from UGA.

Susannah Gordon, Purdue University

In 2011, Susannah Gordon received her Bachelor of Science in psychology from the Franklin College of Arts and Sciences and Bachelor of Science in dietetics from the College of Family and Consumer Sciences at the University of Georgia. She completed a Master of Science in foods and nutrition and dietetic internship at the University of Georgia in 2013 and became a registered dietitian in December of 2013. While at UGA, Susannah also completed a graduate certificate in gerontology and attended the Southeastern Student Mentoring Conference in Gerontology and Geriatrics in 2012 and 2013. Today, she is a first-year PhD student at Purdue University in the department of nutrition science. She works in Dr. Wayne Campbell’s laboratory, the research focus of which is protein and energy requirements, obesity and weight loss, and exercise, muscle strength, and function, with an emphasis on aging. She is currently the project manager for a study assessing the effects of dietary protein patterning on weight loss and resistance training-induced changes in body composition, skeletal muscle, and indices of metabolic syndrome. Susannah’s main interests are nutrition, exercise, body composition, weight loss, and aging.

Christopher Scoggins, Mercer University

Chris Scoggins recently earned his MPH from Mercer University School of Medicine, having previously earned a BS in Psychology from that same institution. During his undergraduate and graduate career, Chris was very involved in researching many aspects of aging, most notably, cognition in older age. This will be Chris’ fifth year attending the mentoring conference. Over the years he has come to realize both the unique nature of this conference and the high quality of work that it showcases. Chris is currently planning his next educational step and is on staff at Mercer University.
Protein requirements of older adults have not been determined with certainty. However, evidence suggests that protein consumption of older adults in the form of protein-rich food sources has potential for countering some of the physical declines and body composition changes that occur with age.

Protein recommendations for the United States population are determined by the Institute of Medicine (IOM) and published in the Dietary Reference Intakes. The current Estimated Average Requirement (EAR) for protein (a value expected to meet the needs of about 50% of the population) for adults 19 years and older is 0.66g/kg/d. In order to determine a protein recommendation that meets the needs of almost the entire population, the Recommended Dietary Allowance (RDA) is calculated by adding a margin of error to the EAR. The current RDA is 0.80g/kg/d and is expected to meet protein requirements of about 98% of the population. The current protein recommendations aim to meet the minimum requirement to maintain metabolic balance of body protein metabolism. The rationale for determining a minimum amount of protein to maintain nutrure is related to the nature of human protein metabolism. Humans have no capacity to store excess protein. When dietary protein is consumed and absorbed, excess that cannot be utilized is oxidized and excreted. Conversely, in times of inadequate dietary protein consumption, amino acids in functional protein pools such as skeletal muscle are used at the expense of maintaining muscle mass and even functionality (1).

The IOM recognizes that the current protein recommendations have several drawbacks, especially in relation to methods used to determine dietary protein requirements and protein recommendations for older adults. The current protein recommendations were determined by nitrogen balance studies. Nitrogen balance studies are currently the only method deemed appropriate for determining dietary protein requirements. However, they have a tendency to falsely underestimate actual protein requirements (1). If a deficit of dietary protein negatively impacts maintenance of skeletal muscle and functional status, underestimating protein requirements for older adults has severe consequences in light of age-related body composition and functional changes. Also, very few nitrogen balance studies in a study sample of older adults exist. Age-related changes, especially changes related to body protein and skeletal muscle maintenance, suggest that differences exist between older and younger adults. Therefore, it is possible that the current protein recommendations for younger adults are inappropriate for their older counterparts. Motivated by these drawbacks, the IOM calls for further research related to protein requirements for older adults and methods of determination.

Although there appear to be differences in protein requirements between younger and older adults, attempts to demonstrate these differences have yielded conflicting results. Nitrogen balance studies that directly compared protein requirements of the two age groups suggest that there are not differences in protein requirements between these age groups and that protein requirements are not different from the current protein recommendations (2). Additionally, a nitrogen balance study conducted in older adults habitually consuming the RDA found some evidence that older adults beneficially adapt to this level of dietary protein consumption by maintaining body mass and fat free mass. On the other hand, within the same study, this group demonstrated a detrimental decrease in thigh muscle area (3). While controlled nitrogen balance and intervention studies fail to resolve this controversy, epidemiologic data strongly suggest that over an extended period of time (three years), older adults who consume increasingly greater levels of dietary protein have greater maintenance of lean mass (4). Although the controversy remains, an important aim of future research endeavors should focus on the relationship between dietary protein intake and its effects on health status and functional outcomes.
An emerging area of research in protein and older adults suggests that the daily pattern of protein consumption may be as important as the total amount of daily dietary protein consumed. Based on the observation that basal muscle protein synthesis rates do not differ significantly between younger and older adults, attention is moving toward maximally stimulating muscle protein synthesis in older adults to counter age-related skeletal muscle loss. Dietary protein stimulates muscle protein synthesis. However, the stimulatory effects of protein from the diet may be blunted in older adults. If the amount of protein consumed at an eating occasion is inadequate, this population will not benefit from the dietary protein consumed. In a series of studies assessing younger and older adults’ ability to stimulate muscle protein synthesis in response to various forms and amounts of protein, researchers demonstrated that older adults could stimulate muscle protein synthesis to the same extent as their younger counterparts (5, 6). However, if the dose or bolus of protein is not large enough, older adults do not stimulate muscle protein synthesis to the same extent as younger adults (7). Further, a short-term study demonstrated the ability to significantly increase the amount of muscle protein synthesis in older adults over a 24-hour period by providing an adequate portion of protein at three meals (breakfast, lunch, and dinner) (8). While the finding of this study seems like a promising strategy for combating age-related body composition changes, there are no long-term studies that assess this phenomenon. Additionally, in order to use these findings to benefit the older adult population, older adults would need to make noteworthy lifestyle changes. According to National Health and Nutrition Examination Survey (NHANES) data, older individuals are more likely to eat smaller amounts of protein at breakfast and lunch and greater amounts of protein at the dinner. Hypothetically, to maximally stimulate muscle protein synthesis every day, older adults would need to change the amount of protein eaten at each meal to achieve a more even distribution of protein throughout the day. This change could require altering food choices for types and portions of foods. Prior to recommending eating an even distribution of protein at each meal, long-term studies that assess the efficacy of this pattern on maintaining skeletal muscle, health status, and functional status should be conducted.

In conclusion, protein requirements for older adults remain an unresolved issue. However, future research efforts should focus on effective strategies for maintaining health and functional status. While evenly distributing protein consumption at each meal has promising potential, no long-term data support this effect in older adults.
References


Keynote Address: Christopher Scoggins

The TRACE-CORE Study and its Implications on Gerontology Research

Introduction

At a time of shifting age demographics, rising healthcare costs, and increasing focus on aging issues, research in the field of gerontology is more important now than ever before. It is important for researchers to meet these challenges with creative and innovative approach. This includes new research solely in the field of gerontology but also an increased focus on collaboration. Researchers in gerontology should embrace the multidisciplinary nature of the field and endeavor to partner with those in other fields. By bringing a gerontological perspective to a wide range of studies, the edges of gerontological knowledge would be forced forward in all directions. The Transitions Risks and Actions in Coronary Events Center for Outcomes Research and Education (TRACE-CORE) study is one such example of collaboration and broad thinking at work. A heart disease study in its inception, TRACE-CORE has immense potential to increase the collective understanding of health in later life in the realm of heart disease but also in many other areas common to the aging experience.

Background of TRACE-CORE

The TRACE-CORE study is a longitudinal cohort study designed to assess Acute Coronary Syndrome (ACS) (1). ACS covers a wide range of coronary events including ST wave elevation myocardial infarctions (STEMI), non-ST wave elevation myocardial infarctions (NSTEMI), and unstable angina. More generally, the study focuses on Coronary Heart Disease and heart attacks of various severities. A total of 2,023 male and female participants ranging in age from 29-91 years of age were recruited into the study and followed over the course of one year after their hospitalization. All participants were patients admitted to one of five study hospitals and diagnosed with ACS. There were no age restrictions on recruitment for the study, however, by nature of the inclusion criteria and conditions being studied, a significant portion of participants were older adults. TRACE-CORE was funded in 2010 by the NIH National Heart Lung and Blood Institute (Grant number: U01HL105268-01) and collected data through 2014.

In-person interviews were conducted with all participants at the time of recruitment. Interview items included medical, social, and dietary metrics, as well as a wide range of psychological measures. Among the psychological metrics were screenings for depression, anxiety, and cognitive status. Following hospitalization, participants were contacted at one, three, six, and twelve months for follow-up interviews. These interviews were very similar to the initial baseline interview conducted in the hospital but also included some questions pertaining to healthcare utilization and medications. In conjunction with these interviews, a thorough medical record abstraction provided a great deal of medical data pertaining to the course of treatment for each participant during her or his hospital stay. Cumulatively, this rigorous and complete assessment technique provided a great deal of information pertaining to post hospitalization transitions following ACS.

Early Investigations

Although it is still fairly early, preliminary findings from the TRACE-CORE data set are beginning to emerge. While the purpose of this study was not exclusively focused on older adults, the gerontological possibilities are almost endless. The diverse and interdisciplinary nature of the data collected coupled with the longitudinal design create a great deal of flexibility and power for gerontological inquiries. A few early stage investigators have preliminary findings of particular interest to gerontologists.
Cognitive impairment among older adults has already been the focus of some early inquiries utilizing TRACE-CORE data. To date, results have shown that cognitive impairment in hospital settings is both extremely common and in most cases remediates within one month of discharge (2). Cognitive impairment often presents a challenge for medication adherence, medical advice adherence, and follow-up appointments. As fluctuations in cognitive function are better understood, protocol and best practices can be adjusted to best accommodate patients and promote positive transitions and outcomes.

Other early stage analyses have focused on issues surrounding health care decision making and health care proxies. One such investigation has compared self-reported health care proxies and actual notation of health care proxies in medical records (3). Having found only 68% agreement between these two sources, many additional questions remain about where the disconnect lies. It is possible that patients may not completely understand proxies and therefore over report them or, in reverse, it could be that health records under report proxies that do exist. In either case, work encouraging the creation and proper documentation of important health decision documents is key to preserving autonomy and dignity when facing the end of life.

As reported at the Southeastern Student Mentoring Conference in 2014, we have also explored some elements that are thought to be associated with positive long-term outcomes. Data presented at that conference focused largely on the ability of the Telephone Interview for Cognitive Status (TICS) and anxiety/depression measures to predict functioning at six months as measured by the Short Form 36 (SF-36). Such a prediction was in reality very messy, and no stark picture emerged from preliminary analyses. Nonetheless, we were able to corroborate earlier findings related to cognitive remediation post hospitalization. Data suggested that, given the known remediation rate, scores one month after hospitalization may prove more useful as predictors than scores obtained in the hospital.

Aside from the few findings summarized here, many other analyses are forthcoming. Currently proposals for ancillary studies are being considered. Among these is an additional five year follow-up of patients to provide data points up to six years after patients ACS hospitalizations. This is of particular interest to those interested in aging as it will allow researchers to see, longitudinally, how ACS interacts with the aging process.

Discussion

Heart disease remains a tremendous problem in the United States. Almost one quarter of all deaths are related to heart disease, and the percentage of deaths related to heart disease increases with age from 12% at age 44 to 31% at age 85 (4). In total that is over 600,000 deaths per year as a result of heart disease (5). Every year over 500,000 Americans have a first heart attack. Due to advances in medicine, many of these individuals will survive, recover and lead productive lives afterwards. Many older adults live with heart disease and its associated comorbidities. Understanding the keys to long term success post-ACS hospitalization is a key part of preserving the quality of life, health, and overall wellbeing of ASC patients as they age. The TRACE-CORE data set has a tremendous amount of potential when it comes to answering the key questions that will make this a reality. It is possible, and not at all unreasonable, to imagine how this data could identify factors that after a first ACS at age 50 would translate to measurable life quality improvements at 75. It only remains for researchers with sufficient imagination and ingenuity to make it so.
References


Anne and Everett Lee Scholarship Awards

Each year, scholarships are awarded to the top three students overall. This year, cash award winners were as follows:

**First Place:** Kristen Johnson  
**Second Place:** Christine Mullen  
**Third Place:** Courtney Vickery

Honorable mentions went to the following students:

**Best Undergraduate:** Victoria Adams  
**Best Poster:** Caitlan Tighe  
**Best Presentation:** Michael Schuier
Abstracts

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Policy Analysis of Title V of the Older Americans Act: Effectiveness of the Senior Community Services Employment Program in Rural Areas

This is a mixed methods study that will examine if Title V of the Older Americans Act, which establishes and appropriates funding for the Senior Community Services Employment Program (SCSEP), is effective at improving the quality of life of older adults in rural communities by helping them gain unsubsidized employment. This will be assessed through secondary analysis of de-identified data that is routinely gained by SCSEP and through key informant interviews. The analysis has not been completed yet, as I am still awaiting IRB approval. I anticipate the results will show that despite the difficulties the program faces in rural areas, such as fewer job openings, the program will still be effective. The conclusion of this paper will include whatever is found to be the implications of the main result as well as recommendations for future research and program administration.
Relationship to Executive Function and the Influence of Depression on the RBANS in Impaired Older Adults

The Repeatable Battery for Assessment and Neuropsychological Status (RBANS) is a widely used neuropsychological assessment measure that is used to assess cognitive decline or improvement by assessing components of immediate memory, visuospatial/constructional functioning, language, attention, and delayed memory. While informative in many ways, an important aspect of functioning that the RBANS is not known to measure is executive functioning, subserving volition, planning, purposive action, and effective planning. This is especially a problem for older adults with memory complaints. Additionally, depression at later life has been shown to assert a mediating influence on executive function. Drawing from an archive of older adults in a larger medical center outpatient clinic, we target neuropsychological measures and depression. We address those subjects who have a dementia (based on DSM-IV criteria) or MCI (Mild Cognitive Impairment, based on standard amnestic criteria). We also use a significant other documenting problems in the community. Subjects also completed the Geriatric Depression Scale. Results show that selected RBANS scales differ in their relationship for MCI versus dementia. Depression does not have a significant mediating effect on RBANS and Trails B. Subtests of the RBANS may be appropriate measures of executive function. However, this may not be true for dementia patients.
Hospice in Prison: From Behind Bars to the Pearly Gates

Between the years of 1999 and 2007 there was a 76.9% increase of the prison population aged 55 and older. The rise of this population suggests that the number of natural deaths in prison will also continue to increase. However, only 75 prisons in the US have implemented hospice programs as a way of caring for these inmates at the end of their lives. Using an in-depth interview I collected preliminary data from a community based hospice manager to better understand the implications of prison hospice. The participant responded to questions regarding her perceptions of hospice implementation in prisons. Responses were coded and analyzed to group common themes within the data. Five themes emerged, including hospice and death as birthrights, compassion, prisoner rehabilitation, societal hesitation and conflict, and collaboration, which is consistent with the literature. Taken together, the participant reported that prison hospice could be beneficial for individuals at three levels: (a) the dying prisoner, (b) the prisoner volunteer, and (c) the institutional culture of the prison. Prison hospice can be an effective way of addressing the rising aging prison population. Additional implications of this research and future directions will be discussed.
The Impact of Age on Anemia in Lumbar Decompression and Fusion Procedures

Background: In patients undergoing huge operations, no clear age cut-point has been set affecting the prevalence of preoperative anemia (PreAn) and the severity of postoperative anemia (PostAn). This study is to investigate how these values affect post-surgery outcomes. Methods: In a retrospective study, 323 patients underwent elective lumbar decompression and fusion procedures (LDF) were divided according to age decades. PreAn represents the percentage of people admitted with anemia. Severity of PostAn was classified as none (0), mild (1), moderate (2), and severe (3) anemia. The impact of age groups on PreAn and PostAn using multivariate analyses were performed. The effects on length of stay (LOS) were also tested. Person/medical variables in addition to number of operated levels were controlled. Results: This study came with five results: 1) PreAn prevalence increases significantly above an age cut-point of 50 (p=0.003). 2) PostAn severity also increases at the same age cut-point (p=0.023) with no significant differences between age groups above that age appeared. 3) Number of comorbidities failed to explain the age impact on PreAn and PostAn (p=0.635 and 0.435 respectively). 4) PostAn showed significant relationship to PreAn (p=1.6*10^-6) only in patients older than 50. 5) PostAn severity was associated with length of stay (LOS) prolongation only in patients over 50 (p=0.001) rather than younger patients (p=0.169). Conclusions: This study suggests that above age of 50, PreAn and PostAn increases significantly. This is associated with longer LOS. This may guide in better care assistance and LOS reduction. Further prospective study is warranted.
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A Systematic Review of Mental Health Literacy Assessments in Adult Populations

Mental health literacy (MHL) addresses knowledge and beliefs about mental disorders which contribute to their recognition, prevention, or treatment. MHL constructs include the ability to recognize specific illnesses; knowledge of how to find mental health information; knowledge of risk factors and causes, of treatments and help available; and attitudes that promote recognition and appropriate help-seeking. Previous research shows that participants with high MHL are more likely to receive mental health care and that improving MHL may have some therapeutic effect alone. Approximately 25% of people are affected by mental disorders annually and about 50% of people experience a mental disorder during their lifetime. Although treatments are often available and highly effective, many people live with untreated or undertreated mental disorders. The prevalence of mental health disorders and the importance of MHL in care uptake suggest that there is a need for an appropriate assessment of MHL to measure the impact of MHL interventions. Using PubMed, PsycINFO, and CINAHL databases, I reviewed assessments of MHL. The literature review includes studies conducted between 1997 and 2014 with adult populations in the English language with MHL as a primary or secondary outcome. Results indicate that many studies use the term MHL but only address specific mental illnesses. Additionally, some assessments fail to address all of the MHL constructs. Universal methods of assessing MHL will allow for scientific rigor and comparison across studies and would therefore be a beneficial direction for future research and aid in the development of effective MHL interventions.
Creating a Community

Among the many repercussions of an aging population is the growing shortage of available resources to meet the needs of older adults such as the need for affordable and appropriate housing options, services that facilitate aging in place, and informal caregiving. But rather than expect others in society to provide for these needs, especially in this political and economic climate, many older adults are coming together to provide for themselves by creating supportive communities. The project described here follows the creation of such a community in a small neighborhood in Athens, Georgia. A literature search provided guidance and ideas for this project, while an action research approach was followed for the implementation, allowing the participants to be fully involved in most aspects of the community’s creation. At this stage of its development, the focus is on getting neighbors connected to each other through a listserv, an exchange of phone numbers, and informal social events. Results so far include increased socialization, support and assistance during medical events (transportation, pet care), and discussions on how the community can help individuals age in place. Participants are planning for the growth and development of the community in the hope that it will meet many more needs as they arise and become a permanent part of the neighborhood. Conclusions can more appropriately be drawn after several months, but the enthusiasm of the group demonstrates that there is a desire, if not a need, for a stronger, more supportive community.
The Influences of Sleep and Pain for MCI versus Dementia on Functioning and Mood

Sleep and pain are prominent problems for older adults, especially with cognitive impairment. This applies most notably to MCI and dementia. Sleep problems have been shown to increase the risk of cognitive decline; pain has been a problem for both MCI and dementia and exhibits problems with quality of life indicators. Sleep and pain have been shown to have a negative effect on mood in cognitively impaired older adults. Understanding the relationship between these three factors becomes especially important in the assessment and treatment of older adults. Archival research of cognitive assessments was conducted through the Georgia Neurosurgical Institute and a primary care center. Cognition was measured using the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS). Sleep was measured utilizing the Epworth Sleepiness Scale (ESS). Treatment issues were measured using the subscales of the Millon Behavioral Medicine Diagnostic (MBMD), and pain measured using specifically the pain sensitivity scale. Mood was measured using the Beck Depression Inventory II (BDI II) and the Geriatric Depression Scale (GDS). Independent t-tests showed little differences on measures of sleep and no differences with pain between MCI and dementia. Sleep and pain combined, however, resulted in some real concerns. When both are present, there resulted in increases in depression and treatment issues, and problems were noted in measures of new learning and recall between those two groups. Overall, we discuss how sleep and pain are similar in older adults with cognitive decline, but the combination is especially virulent for depression and treatment issues.
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Public Housing Relocation of Older Adults in Atlanta: Challenging the Aging in Place Concept

In 2007 AHA demolished two senior high-rise buildings causing the forcible removal of older African American residents who may have wanted to age in place due to community attachment. Aging in place and community attachment are concepts that describe the strong social-psychological attraction to a specific location among older long-term residents (McAuley 1998). This thesis examines if community attachment differ for residents who were forced to relocate and those who were able to age in place. Using longitudinal data from the GSU Urban Health Initiative, I looked at relocated and non-relocating senior public housing residents’ community attachment as it relates to tenure and distance to needed services pre and post-move to explore if community attachment was influenced. Findings reveal that community attachment and aging in place are more complex than originally realized. Tenure and distances to needed services is only one aspect of unique aging for senior minority residents.
Kristen Brown Johnson, BS, RD
Alison Clune Berg, MS, RD
Rachelle Acitelli, MS
Chad Straight, MS
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Weight Management for Older Adults: A Collaboration of the UGA Departments of Kinesiology and Foods and Nutrition

Obesity prevalence among older adults exceeds 30% and contributes to diabetes, disability, nursing home admission, and other concerns. A collaboration of UGA’s Department of Kinesiology and Department of Foods and Nutrition is evaluating and refining evidence-based methods for weight management in older adults. Supervised weight loss interventions are underway in 100 older adults aged 50 to 80 years to test hypotheses including: a.) Six months of higher protein weight loss diets with exercise will be associated with the best health outcomes regarding weight loss, fat mass, and lean mass (DXA), intramuscular fat (MRI), physical function (6 min walk), and fatigue and vitality (POMS, SF-36); b.) Similar to younger people, superior weight loss and health outcomes will be associated with improvements in self-motivation, self-efficacy, and self-monitoring; and c.) Maintenance of weight loss will be associated with use of social media (Facebook), and adherence to goals for measuring body weight (scale), energy and protein intake (MyFitnessPal, 3-day dietary records), and physical activity (accelerometer, PASE, GPAQ). Quantitative results are expected by December 2014. Initial impressions are these enrolled older adults are very capable of and enjoy using social media, interactive dietary and physical activity assessment tools, and participating in moderate- to vigorous-intensity physical activity, and most participants are meeting their weight loss goals. This interdisciplinary team of specialists and student coaches in gerontology, physical activity, nutrition, and behavioral counseling are gaining valuable skills and insights in using evidence-based methods for weight management coaching to improve the health and wellbeing of older people.
Rose Terrace – Independent Retirement Living

This is a description of Rose Terrace, which provides independent retirement living, as well as the reactions of a number of residents that were interviewed recently. Rose Terrace has month-to-month rent for a private suite with multiple floor plans and options. It also includes three nutritious, chef-prepared meals a day and a full calendar of activities, events, and plenty of volunteer opportunities. There are many other services including the opportunity to keep pets. I have been interviewing a number of residents who had been there for varying lengths of time. The ages of the residents that I interviewed ranged from 59 – 100. Some residents were from the Athens area but many of the residents moved here from other parts of the United States because they had children here to assist in their care. Nearly all of the residents were anxious to talk about their children and to describe where they used to live and their reasons for coming to Rose Terrace. Of the residents that I interviewed, most had been married but were living alone now. Most of them had fond memories of the communities where they had lived previously and all expressed regrets at moving and no longer being able to drive. They appeared to have mixed feelings: Most felt like they had lost their identity by leaving their communities but they were happy to be in a retirement center. All expressed satisfaction with the facility at Rose Terrace.
Postmenopausal Breast Cancer Survivors have Lower Intakes of Meat, Dairy, Protein and Calcium than Postmenopausal Women without Breast Cancer

This study assessed differences in meat, dairy, protein and calcium intakes in breast cancer survivors (n = 13) and women without breast cancer (controls, n = 71). All women were postmenopausal [mean age (SD) 58.5 (± 3.8) y, 95% White, 2.4% Asian Pacific, and 2.4% Black] and the two groups did not differ in age, energy intake, or body mass index (p > 0.05). Cancer survivors may be motivated to follow dietary guidelines set by the American Cancer Society (ACS) and American Institute of Cancer Research (AICR) to improve their quality of life and survivorship. The ACS guidelines include recommendations to consume low fat dairy, protein sources low in saturated fat, choosing fish and poultry protein sources over red meat, and to avoid processed meat intake. The AICR guidelines include the recommendation to limit consumption of red meat and avoid processed meat. Diet was assessed using 3-day diet records and analyzed via the Nutrition Data Software for Research (University of Minnesota), and differences in diet were assessed with Student’s T-tests. Compared to controls, the breast cancer survivors consumed less dairy products, animal protein, lean cold cuts and sausage, total protein, calcium, zinc, and riboflavin (p < 0.10), which may be related to attempts to follow the diet recommendations for cancer survivors. Low intakes of calcium were of particular concern in breast cancer survivors who consumed an average of 686 mg calcium/d, which is < 60% of the recommended 1200 mg/d. Given the important role of calcium for bone health and protein in muscle function among aging women, these breast cancer survivors may benefit from consultation with a Registered Dietitian or other health professionals knowledgeable in nutritional recommendations for postmenopausal breast cancer survivors.
Grand-families Raising Grandchildren

Grand-families are families headed by grandparents, grand-foster parents or other older relatives who care full-time for their grandchildren. More than 6 ½ million children across the country live in households maintained by grandparents or other relatives. About 670,000 of the grandparents have a disability and about 58,000 are below the poverty level. The United States Office of Personal Management has called the issue faced by grandparents a “silent epidemic.” This epidemic is caused by individuals and families who have experience divorce, drug and alcohol abuse, mental illness, HIV/AIDS, teenager mothers, incarcerated parents and others. The purpose of this study was twofold. First, we wanted to know more about the issues facing grand-families raising grandchildren. Second, we wanted to know if grand-families would be interested in living in a community that solely service grand-families and also if citizens would support a grand-families raising grandchildren housing complex in Savannah, Georgia. A total of 100 grand-families and 245 citizens participated in the study. The greatest challenges for the grand families include financial hardship (49.9%), stress (45.2%), less time for self/privacy (46.6% / 35.6%), impact on sleep and physical health (both 30%). When we asked grand-families if they would be interested in residing in a community that solely services grand-families raising grandchildren to our surprise, only 54% of the grand families stated that they would be interested. On the other hand, of the 245 citizens who participated in the study, 82% of them supports the notion of housing communities developed to service the needs of grand-families caring for grandchildren.
Engaging older adults in social activities can be difficult, and residents of assisted living communities may perceive additional barriers to participation, such as a lack of friends. This lack of engagement is exacerbated when residents suffer from vision problems, hearing problems, or memory impairment due to Alzheimer’s or related dementias. During my internship at HH Village, a community that offers independent living, assisted living, and memory care, I am interviewing residents to determine their interests in activities. I am also developing activity options for our residents who are legally blind or deaf. My goal for the internship is to engage our blind or deaf residents as well as those in memory care in more activities and social interactions. I am hoping that higher engagement will help to increase the quality of life of residents who have not previously participated in community activities. This internship has helped me learn how to better communicate and interact with older adults with sensory and memory impairment, and to gain insight into their daily social interactions and community involvement.
Background: Oftentimes lesbian, gay, bisexual, and transgender (LGBT) older adults express a fear of discrimination from staff and other residents when seeking long-term care (LTC) services. This fear of discrimination may lead LGBT older adults to go back into the proverbial closet or delay accessing needed care. Many organizations across the nation are starting to offer LGBT specific cultural competency (CC) training to LTC staff in efforts to improve the cultural knowledge, cultural awareness, and cultural skills of the staff. However, there is little known about the effectiveness of these LGBT CC programs in achieving their desired outcomes of improving access and reducing health disparities. Therefore, this review aims to synthesize available information on LGBT CC training for staff, identify the gaps in the literature, and make recommendations for future research and practice.

Design and Methods: A systematic review of CC literature was conducted using 8 electronic databases for articles published between 1994 and 2014. Backward and forward citation tracking was also used to find relevant articles. Results: LGBT CC frameworks, training programs, and assessment tools vary across the nation. Researchers and organizations are developing unique frameworks and training programs to meet their immediate needs with little to no utilization of existing work, thus adding to the complexities and lack of standardization within LGBT CC. Conclusion: This lack of consistency in the LGBT CC literature leads to numerous opportunities in future research to build upon existing models, training programs, and assessment tools with a goal of establishing evidence based standards.
Comparative analysis of the MBMD and PAI Depression and Anxiety Subscales with Prominent Measures

The Million Behavioral Medicine Diagnostic (MBMD) and the Personality Assessment Inventory (PAI) are prominent personality assessment tools in clinical psychology. These objective personality assessments have been developed to provide a profile of a person, suggest diagnoses, and facilitate intervention planning. These were developed for different populations; MBMD for medical-behavioral considerations and PAI for psychiatric issues. They assess common problems and are considered largely interrelated. Neither scale has yet to be examined in an elderly population, especially with cognitive impairment. The study currently consists of individuals ages 60 years and older who present for memory problems at a Family Health Center. Of a larger population (N=496), we identified 59 subjects who completed the PAI and 192 who completed the MBMD, who presented with either MCI or dementia. Relevant affect subscales of both omnibus measures were targeted and examined against each other as well as their concurrent validity with other popularly utilized measures -- Beck Depression Inventory-II, Geriatric Depression Scale-Short Form, and Short Anxiety Screening test. Intercorrelations of these scales were assessed and correct classification ratios provided. Significant correlations resulted between Depression and Anxiety scales of both the PAI and MBMD when all subjects were involved. This also applied to other affect measures. When groups were separated, results demonstrated profile differences for MCI and dementia with MCI patients showing more concordance among the measures than the dementia group. We discuss the importance of these omnibus measures and the nuance of differences between MCI and dementia.
Comparison of MMSE and ACTIVE Methods for the Identification of MCI

Mild Cognitive Impairment (MCI) is a term used to identify older adults with memory deficits but without dementia or significant related functional disability. Some research suggests that MCI is an introductory phase that may develop into more severe dementia. Ideally, multiple assessment tools should be used to determine MCI but this is often not practical in the clinical setting. Using secondary data on 2,045 participants from the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) study, we compared two methods of determining MCI: the Mini Mental State Examination (MMSE) and composite scores from nine tests measuring memory, processing speed and reasoning (e.g. Hopkins Verbal Learning Test, Word Series Test). MCI designation was determined by using a cutoff score of <27 for the MMSE and by using a formula for the composite scores from the ACTIVE study. Chi-square analysis was used to compare MCI designation using the two methods and kappa values were calculated to assess agreement. Results showed that the two methods only agreed 68% of the time. The kappa statistic was .139 (p<.001) suggesting low agreement between the two measures. While the ACTIVE tests for MCI are more rigorous than the MMSE, the ACTIVE tests are significantly more time-consuming and not practical in the clinical setting. While it is possible that the MMSE may not be sensitive enough to detect MCI, it may still be useful as a screening tool. However, caution is warranted. Older adults identified with MCI by the MMSE should be referred for further testing.
Food Insecurity is Associated with Cognitive Restraint of Food Intake in Older Congregate Meal Participants

This study explored relationships of food insecurity with cognitive restraint, uncontrolled eating, and emotional eating behaviors among congregate meal participants in northeast Georgia (n = 118, age 60 and older, mean (SD) age = 75 (8) years, 25% male, 75% female, 57% White, 43% Black, 53% obese, BMI ≥ 30). Food insecurity was assessed with a 6-item questionnaire (adapted from USDA, 2012, Wolfe et al, 2003); scores ranged from 0 to 6 and were defined as high or marginal food security, FS, 0-1 (70%); low food security, LFS, 2-4 (20%); very low food security, VLFS, 5-6 (10%); and low and very low food security, LVLFS, 2-6 (30%). Eating behavior was assessed with an 18-item Three-Factor Eating Questionnaire R-18 (Karlsson et al 2000, Porter and Johnson, 2011). Food insecurity was consistently associated with cognitive restraint, but not with uncontrolled or emotional eating. Summary scores of food insecurity and cognitive restraint were significantly correlated (rho = 0.20, p ≤ 0.05) and the prevalence of cognitive restraint scores above the median split was 47% in FS and 71% in LVLFS (p ≤ 0.001-0.06). In multivariate regression analyses, food insecurity was consistently associated with cognitive restraint (p ≤ 0.05) even when controlled for potential confounders (demographics and health). Although cognitive restraint is defined as the conscious restriction of food intake to control body weight or promote weight loss, our findings suggest there may be other dimensions of cognitive restraint to consider in nutritional assessment and interventions among food insecure older adults.
This two-part study analyzed data collected from middle-aged (age 44-64) and older adult women (age 65+) with one or more chronic conditions who completed the National Council on Aging/California HealthCare Foundation Chronic Care Survey. Part One analyzed data from 418 women to describe sociodemographics, disease types, and healthcare utilization associated with internet use among middle-aged and older adult women with 1 or more chronic diseases. Part Two analyzed data from the 251 internet-using women to identify the online self-care resources they are using (format, host organization) and for what purposes. Approximately 31% of participants were age 65 years or older, 30% reported having 3 or more chronic condition types, and 65% reported using the internet. A significantly larger proportion of older adult females reported multiple chronic conditions, and a significantly fewer number of older adult females reported using the internet. A significantly smaller proportion of internet users were non-white, more educated, and employed. A significantly larger proportion of non-internet users reported needing help learning what to do to manage their health conditions and needing help learning how to care for their health conditions. Among only internet-using women, 18.7% participated in online discussions/chatrooms/listserv and 45.2% read about the experiences of others with chronic diseases. Interest in websites and online courses varied. Understanding internet use among women with chronic conditions can inform targeted efforts to increase internet availability, educate potential users about the benefits of online resources, and effectively tailor internet-based materials to self-care needs.
Problem: Parkinson’s disease (PD) is a complex age-related neurodegenerative disorder, requiring support from numerous specialized healthcare professionals. However, few healthcare organizations can accommodate such a wide range of services onsite, referring out patients for additional care. To meet the needs of patients throughout North Carolina, the Movement Disorders Center at UNC Chapel Hill developed a referral network program based on the Chronic Care Model to expand and connect specialized services for PD. Aims of the program included: 1) creating an on-site interdisciplinary PD clinic, 2) working with community stakeholders to enhance PD-specific knowledge of NC healthcare personnel, and 3) connecting patients to their local expert care providers through the ParkNC website.

Method: Three hospital departments collaborated to create the Interdisciplinary PD clinic, which has assessed sixty-four patients from ten NC counties and four states in the three years since development. The UNC team worked with home health agencies and rehabilitation centers throughout NC to recruit allied health professionals for specialized training and inclusion in the ParkNC referral network.

Results: This growing network of 73 healthcare professionals serves two primary functions: providing referrals and resources to patients, and offering PD education to professionals. ParkNC.org receives nearly 500 unique visitors monthly, and has logged over 5,000 visits since the site launched in 2012.

Conclusions: ParkNC can serve as a model for other states to develop similar networks to improve the quality of care for the more than 1 million individuals living with PD in the United States.
Perception versus Reality: Ageism Illustrated in Undergraduate Student Sketches

Issues of ageism have been with us for six decades since Robert Butler introduced the term in 1968. So, too, have attempts to capture the essence of the ageist images of undergraduates through a variety of verbal and visual measures. This presentation focuses on one approach, the interpretation of student hand-drawn sketches to reveal the dimensions of ageism. In 1926, hand drawn sketches were used to measure personality problems and intelligence. More recently, hand drawn sketches have been used to look at attitudes towards older adults. Using a meta-analysis of a growing literature on this topic, alternative approaches to the collection and interpretation of student sketches are critically reviewed. Three primary substantive dimensions of ageism are identified within the meta-analysis of the drawings: a predominance of drawings of older women, heavy emphasis on adaptive equipment including walkers, hearing aids and glasses, and a focus on physical features including wrinkles and frowns. This material is then employed in developing a methodology that is to be used in a regionally comparative study of undergraduate perceptions in institutions of higher education across the nation that is scheduled for implementation in the fall of 2014.
Ecological Theory and the Transitions Model use in Decision Making during End of Life Care

An end of life decision for a family member who is on life support can be very difficult. The decision to terminate life support is complex but extremely commonplace; up to 90% of deaths in intensive care units involve withholding or withdrawing life-sustaining treatments. The Transitions Model, which relies on counselor-based family medical therapy to facilitate end of life decisions, has been applied to thousands of families of life support patients to provide assistance with family grief, hospital expense, and duration and trajectory of care. The Transitions Model, developed at the Medical Center of Central Georgia (MCCG) in 2004, has only been regionally employed thus far but merits exploration within a broader population given its success in reducing familial stress. While the influence of family dynamics and characteristics on end of life decision-making has received some attention in the literature, the interplay among spatially variable factors of religiosity, family size, relationship of surrogate decision maker to the patient, and family dynamics is not well understood. In this presentation, I will provide preliminary findings from the MCCG Transitions unit clinical database on the role of family size and religiosity as well in end of life decisions, and will then critically chart future research directions.
Depression Scales for Late-Life Cognitively Impaired Adults

Identifying and properly diagnosing depressive symptoms in late-life adults is a difficult challenge, especially those with dementia or mild cognitive impairment (MCI). In particular, difficulties in classification of depression in MCI or dementia patients arise due to subtle symptom differences in depression. This applies to both MCI and dementia as well as those without cognitive problems. These minute differences has shown to lead to the under diagnosis of depression in those suffering from MCI and dementia (get reference, easy to find). The study measured individuals ages 60 years and older who present for memory problems, psychiatric issues, or functional problems at a Family Health Center. We conducted a factor analyses on the Beck Depression Inventory-II, a commonly used depression measure. Based on the results, we developed three short depression measures for each population. Items reflective of depression differed for each population; MCI, dementia, and normal. Each scale was further correlated with two other standard depression measures for concurrent validation (GDS and MBMD Depression). There were differences: MCI and normals correlated strongly with the standard measures; dementia, less so. Finally, we aggregated MCI and dementia measures into a single measure yielding the highest relationships among the two standard measures. Results indicate that while standard measures of depression may have difficulty in diagnosing depression in late-life adults, particularly those with cognitive impairments, there may be hope in creating measures specifically tailored to the signs of depression that each population, respectively, exhibits.
Personal Mastery, Perceived Constraints, and Affect: The Relevance of Age

The association between perceived control and affect is well-established. Although typically studied at the general level, it has been proposed that perceived control is comprised of two component constructs, personal mastery and perceived constraints, which represent different facets of control. Because these constructs demonstrate distinct, age-related trajectories, the objective of the current analysis is to examine how these constructs differentially relate to affect, across ages. An archival analysis was conducted on data from the Midlife in the United States longitudinal follow-up study, MIDUS-II. Participants were 1,548 community-dwelling adults ranging in age from 33 to 84 years old. Measures of personal mastery, perceived constraints, positive affect, and negative affect were completed by mail. Marital status, race, self-rated health, and gender were covariates in the models. Multi-tiered regression analyses indicated that as age increases, personal mastery is less strongly associated with positive affect, $\beta = -.45$, $p = .03$, and perceived constraints are less strongly associated with negative affect, $\beta = -.67$, $p < .001$. Overall, the findings suggest that, as age increases, personal mastery and perceived constraints are less closely associated with positive and negative affect, respectively. These results are consistent with existing models of emotion regulation in adulthood, as it appears that as age increases, the affective experience is influenced to a lesser extent by perceptions of control. Given the differential association of personal mastery and perceived constraints with affect across ages, the present findings reinforce the need to separately examine these components of perceived control.
Postmenopausal Breast Cancer Survivors have Higher Intakes of Legumes and Lower Intakes of Other Plant Foods, Alcohol, and Nonnutritive Sweeteners

The purpose of this study was to determine differences in consumption of selected plant based foods and nutrients, alcohol, and nonnutritive sweeteners in breast cancer survivors (n = 13) and non-breast cancer survivors (controls, n = 71); all postmenopausal [n = 84, mean age (SD) = 58.5 (3.8) y, 95% white, 2.4% black, 2.4% Asian Pacific]. The American Cancer Society’s (ACS) recommendations for cancer prevention and survivorship include sufficient dietary fiber, increased consumption of plant-based foods, choosing whole grains instead of refined grains, and moderate consumption of alcohol and nonnutritive sweeteners. Diets were assessed via 3-day diet records and analyzed with the University of Minnesota’s Nutrition Data System for Research (2013) and differences were assessed by Student’s T-test. Compared to controls, the breast cancer survivors had higher intakes of legumes and lower intakes of several whole grain foods, deep yellow vegetables, other starchy vegetables, alcohol, and nonnutritive sweeteners (all p < 0.05), but similar intakes of fruit, dietary fiber (controls vs. survivors: 22.0 g/d vs. 24.5 g/d; recommended = 21 g/d) and dietary vitamin C (104 mg/d vs.109 mg/d; recommended = 75 mg/d). Although it is not clear why breast cancer survivors seem to favor legumes over certain whole grains and certain vegetables, it may be prudent to continue to limit alcohol intake given concerns about alcohol and increased risk of breast cancer. Since large percentages of these postmenopausal women were not meeting recommendations for fiber (~51%) and vitamin C (~65%), nutrition education may be needed to improve nutritional status.
Subjective Mental Health among LGB Latino and Asian American Adults: A Comparison between Older and Younger Adults

Although there is a significant amount of literature on lesbian, gay and bisexual (LGB) adults, there has been very little research on the experiences of Latino and Asian American LGB populations. This is especially true for LGB Latino and Asian American older adults. Using secondary data from the National Latino and Asian American Study (2002-2003) we examined the relation between subjective mental health and age in a sub-sample of 402 LGB adults when controlling for psychological distress, religious and social support and a subjective rating of physical health. Independent t-tests revealed that LGB adults over 55 reported significantly lower subjective mental health and physical health than LGB adults under 55 but there was no significant difference on psychological distress. In addition, LGB older adults reported significantly less support from friends but there was no significant difference on support from relatives. LGB older adults also reported seeking comfort in religion significantly more than younger adults. When these variables were entered into a regression equation, only age and subjective health predicted subjective mental health. Being older and rating one’s health as worse predicted worse mental health appraisal. These results suggest that the lower subjective mental health ratings among LGB adults over 55 may be partially explained by their perception of their physical health; however, the differences on support from friends and religious/spiritual support are worth noting. One limitation is that the survey questions made it difficult to disentangle experiences related to culture to those related to sexuality.
Detection of Depressive Symptoms by Caregivers in Assisted Living: The Influence of Cognitive Status

Previous research indicates that skilled nursing facility staff have difficulty detecting depression in the residents they care for, but assisted living facility (ALF) staff’s ability to detect residents’ depression has not been examined. This study therefore assessed ALF staff’s ability to detect depression in residents, and how cognitive status affects this ability. Twenty-four residents and staff from 3 Atlanta ALFs were interviewed. Residents completed the 30-item Geriatric Depression Scale (GDS); staff completed the 15-item GDS. Residents also completed the Mini Mental State Examination (MMSE), and measures of basic (ADLs) and instrumental activities of daily living (IADLs), and perceived health. Staff rated the resident’s functional status and health using parallel measures. Bivariate correlations yielded no significant correlation between the resident- and staff-rated GDS (.091), but that association differed markedly for cognitively impaired (-.209) vs. intact residents (.195). Residents’ total ADL score was significantly correlated with depression (-.519, p=.039). Staff and resident ratings were significantly correlated for ADLS (.429), p=.037 but not IADLs (-.002). In contrast, both staff and resident ratings of general health ratings were significantly correlated with total IADL score (resident r = -.530, p=.002; staff r = -.451, p=.027) but not with ADLs. Other supporting correlations were low and insignificant (ranging from -.15 to -.38). These results indicate that ALF staff members have less difficulty identifying depression in intact residents. Additionally, IADL scores influence general health more so than ADL scores, despite the higher agreement between residents and staff on ADLs.
Effects of the Repeal of the Defence of Marriage Act for LGBT Couples

Older Lesbian, Gay, Bisexual and Transgender (LGBT) couples have been subject to various forms of direct and indirect legal and financial discrimination that does not apply to couples of different sexes. This paper examines how far the Supreme Court decision in Windsor v United States (June 2013) removes this discrimination and the reaction to the decision, of bodies representing the LGBT community. The Supreme Court in Windsor v United States repealed Section 3 of the Defence of Marriage Act (DOMA) which had expressly forbidden the federal government to recognise same sex marriage for federal programs and benefits. The Supreme Court decision has given LGBT married couples access to Social Security spousal retirement, disability, lump sum death and survivor benefits and the IRS now recognises LGBT married couples for tax allowance purposes. However, the Supreme Court did not address Section 2 of DOMA which continues to allow states to decide not to recognise same sex marriage, legally undertaken in a state recognising such marriages, for the purposes of state administered programs and benefits such as Medicaid and the Family Medical and Leave Act. The paper will examine the reaction of the LGBT community, at a state level where possible, to the decision which partially addresses discrimination against them but does not address continuing discrimination in the form of lack of recognition of LGBT marriage in all states and employment discrimination against the LGBT community which affects their earnings and capacity to finance their retirement.