

initially reluctant, continual engagement with senior faith leaders helped to facilitate the successful development of a research registry of congregants interested in participating in faith-based and clinical research and establishment of new programs to congregants around brain health and dementia.

CUIDATXT: A TEXT MESSAGE DEMENTIA-CAREGIVER INTERVENTION FOR LATINOS

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Latino family caregivers of people with dementia have low access to caregiver support. Text messaging holds potential to dramatically enhance the reach of caregiver support interventions among Latinos. This presentation will describe the CuidaTXT Project, with a special emphasis on approach to recruitment and community engagement to achieve the objectives of designing and testing the first dementia caregiver-support text message intervention for Latinos. Based on the Stress Process Framework, CuidaTXT incorporates social support and coping components including AD education, problem-solving skills training, social network support, care management and referral to community resources via tailored two-way messaging. Engagement in CuidaTXT benefited from multi-source recruitment efforts in the Latino community-network built over a three-year period. The network is comprised of senior, religious and community centers, the local media, clinics, a Latino registry and a dementia health navigation service. This presentation will describe processes for assembling and engaging the network for CuidaTXT.

EXAMINING HOW AFRICAN AMERICAN FAMILY DEMENTIA CAREGIVERS CONCEPTUALIZE AND MANAGE CRISIS EVENTS

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African American (AA) family dementia caregivers report high unmet needs, which often culminate in crisis – an unplanned stressful situation requiring immediate decision. However, perspectives from AA caregivers regarding crisis are lacking. To gain insight into caregivers' conceptualization and experiences of crisis, we used community/coalitional-based recruitment of AA caregivers to conduct semi-structured interviews with 34 AA caregivers which were analyzed using thematic analysis (N=34, 94% female, 56% ages 65 to 74). AA caregivers largely perceived crisis as stressful events, a normal part of caregiving and viewed management of these events as routine. Crisis was characterized as ongoing, lengthy or emergent, sometimes necessitating external support (e.g. hospitalization). Caregivers managed crisis by increasing caregiving work, de-prioritizing their own health and needs, involving family and friends, and accessing emotional support through neighborhood connections. These perspectives can inform future culturally-tailored interventions that are responsive to AA strengths, values, and help seeking preferences.

SESSION 7115 (SYMPOSIUM)

FIGS STUDY OUTCOMES: DISENTANGLING RELATIONSHIPS BETWEEN VISION LOSS, THE ENVIRONMENT, PHYSICAL ACTIVITY, AND FALLS

Chair: Pradeep Ramulu

Co-Chair: Laura Gitlin

Discussant: Jennifer Schrack

The longitudinal relationships between various aspects of mobility (with each other and with vision loss) are important to understand for healthy aging. The Falls in Glaucoma Study (FIGS) was a three-year longitudinal study conducted in persons with a range of visual field damage from glaucoma (from normal visual fields to severe visual field damage) and evaluated several aspects of mobility: physical function (gait and balance), physical activity (annual accelerometer trials), fall rates (prospectively-collected falls calendars), environmental features (an in-home assessment), and fear of falling. In this symposium, we present data demonstrating that: (1) physical activity is altered by visual field damage - lowering the overall amount of physical activity, and also resulting in more fragmented activity (i.e. shorter activity bouts); (2) specific home environmental features, such as better lighting, are associated with lower rates of falls within the home; (3) specific gait and balance features increase the risk of falling, but do not explain the association between visual field damage and a higher rate of falls; (4) injurious falls, but not non-injurious falls, lead to future reductions in physical activity; and (5) worsening of fear of falling (FoF) leads to either a higher rate of falls (at low FoF levels) or decreases in physical activity (at higher FoF levels). Study findings will educate the audience about the types of mobility problems found in persons with visual field damage, potential methods to prevent falls in older adults, and factors likely to predict future mobility deficits in older adults.

IMPACT OF FEAR OF FALLING ON FUTURE FALLS AND CHANGES IN PHYSICAL ACTIVITY IN OLDER ADULTS WITH GLAUCOMA

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To understand how Fear of falling (FoF) alters mobility, FoF was evaluated annually in 243 older adults (median age=70) with varying degrees of visual field loss from glaucoma, and Rasch-analyzed FoF scores associated with the likelihood of falling in the following year (judged by prospective calendar data) and changes in physical activity (Judged by annual accelerometer trials). At lower FoF levels, each one-unit worsening in FoF was associated with a 2.73-fold higher odds of reporting a fall in the next year (95% CI:1.55,4.81) but not with average daily steps taken

($p = 0.44$). At higher FoF levels, inter-year changes in FoF were not significantly associated with a fall in the next year ($p = 0.78$); but were associated with 407 fewer daily steps taken per one-unit change in FoF (95% CI:-743,-71). FoF is an important driver of mobility; the specific aspects of mobility affected varies by the degree of FoF.

COMPARING LONGITUDINAL CHANGES IN PHYSICAL ACTIVITY AND FEAR OF FALLING IN NON-FALLERS, FALLERS, AND INJURIOUS FALLERS

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Older adults with visual impairments experience a higher risk of falling, and are more vulnerable to associated adverse health consequences than those with normal vision. We investigated the onset and magnitude of declines in physical activity (PA), and corresponding changes in self-reported fear of falling (FoF) in 234 visually impaired persons (mean age=69.8, 48.7% women) over three years. PA was measured using the Actical hip-worn accelerometer and falls were reported using a calendar. In fully adjusted linear models, PA declined 426 steps/year ($p < 0.01$) and 15.1 active minutes/year ($p < 0.01$) among injurious fallers compared to non-fallers; PA did not change among non-injurious fallers. No longitudinal declines in FoF scores were observed. Among visually impaired older adults, an injurious fall contributed to subsequent declines in activity, although FoF remained unchanged. Further longitudinal research is warranted to better understand how different groups respond to falls, either by behavioral changes and/or changes in FoF.

PATTERNS OF DAILY PHYSICAL ACTIVITY ACROSS THE SPECTRUM OF VISUAL FIELD DAMAGE IN GLAUCOMA PATIENTS

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Visual impairment (VI) has been linked with low physical activity (PA) and higher risk of poor function with aging, yet how VI affects daily patterns of physical activity (PA) is undefined. We assessed the association between visual field (VF) damage and: (i) activity fragmentation and (ii) diurnal

patterns of PA in 237 glaucoma patients (mean age=70.6, 51.5% men). PA was measured using the Actical hip-worn accelerometer and VF damage was defined by average VF sensitivity. In adjusted linear models, each 5-dB decrement in IVF sensitivity was associated with 16.3 fewer active minutes/day and 2% higher activity fragmentation (both $p < .05$). In time-of-day analyses, those with lower IVF sensitivity were less active, but this did not vary by time-of-day. Older adults with worse VF damage demonstrate shorter, more fragmented bouts of PA throughout the day, which may reflect lower physiologic functioning. Future work should examine the temporality of this association.

THE RELATIONSHIP BETWEEN THE HOME ENVIRONMENT AND FALLS FOR OLDER ADULTS WITH VISUAL IMPAIRMENTS

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The home environment and features of the home have been identified as important risk factors for falls, and may pose particular risk for older adults with visual impairments given difficulty with hazard perception. We used data from 245 participants in the Falls in Glaucoma Study [mean age: 71 years, mean follow-up: 31 months] with homes graded using our previously validated Home Environment Assessment for the Visually Impaired (HEAVI), which quantifies the number of in-home fall-related hazards and found that neither the number of hazards nor the percentage of hazardous items were associated falls/year. However, each 10-fold increase in lighting was associated with a 35% lower rate of falls/year (RR=0.65, 95% CI=0.46 to 0.92) and there was a 50% reduction in falls/year when lighting was at or above 30 footcandles (minimum lighting level recommended by the Engineering Society of North America) compared to lighting <30 footcandles (RR=0.50, 95% CI=0.26 to 0.96).

GAIT AND BALANCE AS PREDICTORS OR MEDIATORS OF FALLS IN GLAUCOMA

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Balance and gait are modifiable targets for falls prevention and may play an important role in preventing falls in older visually impaired individuals. Balance and gait were objectively evaluated in the 239 Falls in Glaucoma Study participants (average age=70.5, 22% with moderate-severe visual field (VF) damage). Greater sway, more time in double support and greater swing time variability were associated with higher fall rates, while higher gait velocity and faster cadence were associated with lower rates ($p < 0.05$ for all). Neither gait nor balance