

predicted, scores on the dementia worry measure did not correlate significantly with any cognitive measure ( $ps > .29$ ). **Conclusions:** Dementia worry did not correlate with actual cognitive performance, suggesting that elevated concern regarding development of dementia was unrelated to actual cognitive status—that is, dementia worry does not simply represent perception of real cognitive impairment. Results also suggest that increased age may be associated with lower dementia worry; this may suggest that with advanced age may come a sense of invulnerability to cognitive decline, or may reflect cohort differences in fear of developing dementia (potentially related to increased public awareness of AD among younger cohorts).

## P3-275

### DIOGENES SYNDROME: THE ETHICAL DIMENSIONS

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**Background:** Diogenes syndrome is a disorder that is characterized by extreme self neglect, domestic squalor, social withdrawal, lack of concern about living conditions and hoarding. It is thought to affect 1 in every 2000 persons over the age of 60 living in the community. Ethics are called in to question as the affected individual usually refuses assistance or treatment and health professionals tend to force care on this population. Individuals with this syndrome are very resistant to receiving assistance and are often content to continue living in abysmal conditions. **Methods:** Developing a therapeutic rapport with the individual can be challenging, but of paramount importance. Without trusted support and guidance, there is unlikely to be any change achieved. The challenge exists of creating a delicate balance between respecting an individual's autonomy and ensuring personal safety. Using a harm reduction model approach to care is often effective with this population and it allows a high level of autonomy to be maintained. **Results:** The individual's cognitive ability is often questioned as seemingly poor decisions are made to live in squalor conditions that differ in accordance with our social norms. With no medical involvement there is rarely a formal diagnosis of a dementia, however, dementia is suspected in many cases. Research and personal experience has shown that seniors with this syndrome have a 2 times greater risk of death upon admission to long term care than do other community dwelling seniors. **Conclusions:** There is value in liaising with community partners to support the individual to continue to live in the community. Much of the presentation is based on the presenter's clinical practice while working for the Gatekeepers Program in Hamilton, Ontario.

## P3-276

### FATIGUE-RELATED CHANGES IN DRIVING PERFORMANCE: COMPARISON BETWEEN HEALTHY YOUNGER AND OLDER ADULTS AND PERSONS WITH EARLY ALZHEIMER'S DISEASE

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**Background:** Mental fatigue leads to decrements in cognitive functions, such as attention and executive functioning, which are important for daily activities like driving. However, few studies have considered relationships among age, cognition, and fatigue. The present study investigated how fatigue affects driving performances

by comparing younger, older, and early-Alzheimer disease participants. **Methods:** Participants were 32 healthy younger (18-30 years) and 21 older healthy adults (>65 years) and 15 persons with early Alzheimer's (AD). Driving simulation used a 45" computer monitor with STISIM software, presenting a 60-minute monotonous drive designed to elicit fatigue. Speed, lane position, variability, and errors were measured and compared across 10-minute segments of the drive. Self-reported tiredness ratings and tasks from the computerized CogState battery were administered pre- and post-simulation to assess the effects of fatigue on working memory and learning. **Results:** All groups similarly increased in self-reported fatigue throughout the drive ( $p < .001$ ) and only early-AD drove slower ( $p < .05$ ). Post hoc comparisons demonstrated the early-AD had higher lane variability and errors across time. Overall, the young differed from the early-AD during the first and second 10-minute segments by exhibiting minimal errors and lane variability, but performance generally declined over time to become comparable to the early-AD. In comparison, initially similar to early-AD, the older group improved lane variability to a stable level after the first 10-minute segment. For all CogState tasks, the early-AD group performed worse at baseline. Although younger and older adults differed at pre-simulation only in working memory, with the older group performing worse, by post-simulation, both groups exhibited similar performances, as the young had somewhat declined and older somewhat improved. **Conclusions:** The results highlight the potential for significant driving deficits in early-AD drivers. Furthermore, when considering healthy drivers, except for the first segment, older drivers generally remained stable in the outcome measures over time once they adjusted to task demands. Younger adults were more affected by fatigue than older drivers, perhaps related to older drivers' experience. These results raise concerns about younger drivers' ability to cope with fatigue when driving. Finally, fatigue-related driving effects may be evident even before deficits are seen on more traditional, standardized cognitive testing.

## P3-277

### LEVELS OF COGNITIVE IMPAIRMENT AMONG ELDERLY IN CUBA: FINDINGS FROM THE SURVEY ON HEALTH, WELL-BEING, AND AGING IN LATIN AMERICA AND THE CARIBBEAN (SABE)

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**Background:** With the potential for more open relations between the United States and the nation of Cuba, we also hope to learn more about the health of Cuban elders. While there has been a growth in gerontological research in Latin American (LA) due largely to PAHO and national initiatives, much work remains to be done. For Cuba, a 50 year embargo on the exchange of scientific and technical information means almost nothing is known about the health, and cognitive states of Cuban elders. This paper employs the Cuban module of SABE to examine the cognitive functioning of Cubans over the age of 60. The SABE Cuban sample is a representative sample of elders living in the city of Havana and, to our knowledge, provides the only study of Cuban elders available to the broader research community. **Methods:** The paper used data from the Cuban sample of the 2000 SABE, funded by PAHO to better understand the health of the aging population in Latin America. The Cuban sample represents a survey of 1,905 individuals aged 60 and older with a weighted sample of 1,811,043 individuals. Cognitive

functioning is measured using a Modified MMSE was developed by the PAHO researchers using nine variables instead of the 19 original MMSE variables. A cutoff point of 12/13 was defined to identify people with cognitive deterioration. With the MMSE, the study also used the Yesavage Geriatric Depression Scale to provide a measure of mental health. **Results:** Weighted analysis finds that 4% of Cuban women and 3% of Cuban men scored a problematic MMSE. While this is lower than rates seen for some LA nations, it is consistent with earlier work, estimating overall rates in LA at 4%. Multivariate analysis provides insight into the demographic and health behaviors associated with higher risks of cognitive deterioration. **Conclusions:** This paper presents insight into the little understood pattern of health and cognitive decline among the aged in Cuba. Analysis suggests that rates are consistent with other LA nations but overall health and family support also play a role in managing the health of the cognitively impaired.

### Summary MMSE Scores for Cuban Elders Aged 60 and Older: 2002

	MMSE Score	Gender Female	Male	TOTAL		
	13 or more	95.7	97.4	96.4		
		57.4	42.6	100		
		187,540.00	139,189.00	326,729.00		
	12 or less	4.3	2.6	3.6		
		69.7	30.3	100		
		8,395.00	3,648.00	12,043.00		
	COL TOTAL	100	100	100		
		57.8	42.2	100		
		195,935.00	142,837.00	338,772.00		
Color coding	< -2.0	< -1.0	< 0.0	> 0.0	> 1.0	> 2.0
N in each	smaller than expected			Larger than expected		

SURVEY ON HEALTH, WELL-BEING, AND AGING IN LATIN AMERICA AND THE CARIBBEAN, 2000, Cuba Dataset

### P3-278 QUALITY OF LIFE IN MILD COGNITIVE IMPAIRMENT (MCI) AND ALZHEIMER'S DEMENTIA (AD): PATIENT VERSUS CAREGIVER PERSPECTIVE AND PREDICTORS

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**Background:** Quality of life (QoL) is an important outcome measure of success of treatment in Alzheimer's dementia (AD) and Mild Cognitive Impairment (MCI). The current study compares self-report and caregiver QoL ratings and also examines the role of patient characteristics in differences in QoL ratings as well as relationship between functional independence with QoL. **Methods:** The sample consists of 34 community dwelling patient/caregiver dyads with patient diagnosis of AD and MCI. QoL was assessed using QoL-AD with ratings obtained by both patient and caregiver. Mean patient age was 78 years (SD = 8.9); the sample was predominantly male and Caucasian (32M/2F, 87% Caucasian). Cognitive deficits (Mini-Mental State Exam, neuropsychological battery assessing language, memory and executive function), neuropsychiatric symptoms (Neuropsychiatry inventory), functional independence (Timed get up and Go test; Functional Activities Questionnaire, Activities of Daily Living) were examined as correlates of QoL. **Results:** The Functional Activities Questionnaire revealed that the patients were highly dependent on their caregivers (M (SD) = 14.6(8.9)), with 70% of the patients having scores classifying them as being functionally dependent on their caregiver.

A 2-proportion z-test comparing the prevalence of dependence between MCI and AD patients was significant (MCI = 8%, AD = 50%,  $p < 0.05$ ). To see if this effect was also present in QoL ratings, a repeated measure analysis of variance compared dyad QoL ratings across MCI and AD. The model showed a significant main effect between patient and caregiver QoL ratings ( $F(1, 22) = 14.1$ ,  $p = 0.001$ ) with post hoc testing revealing that caregivers reported lower QoL compared to the patient. There was no difference between MCI and AD diagnoses for QoL ratings ( $F(1, 22) = 0.05$ ,  $p = 0.84$ ), and no significant rater by diagnosis interaction ( $F(1, 22) = 0.58$ ,  $p = 0.56$ ). There were positive relationships between QoL and level of independence for Activities of Daily Living for both caregivers and patients (caregivers  $r(24) = 0.52$ ; patients  $r(24) = 0.53$ ). **Conclusions:** There were significant difference in QoL ratings between caregiver and patients' ratings, with caregivers consistently reported lower QoL compared to the patient in both MCI and AD.

P3-279

WITHDRAWN

P3-280

### UNDERSTANDING THE STRATEGIES REQUIRED TO MEET HYDRATION NEEDS OF PEOPLE LIVING WITH DEMENTIA

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**Background:** Dementia can increase the risk of dehydration as cognitive impairment and old age reduce the ability to recognise thirst. Dehydration can cause further deterioration in cognitive function and other health problems. There is no consensus on recommended fluid intakes for dementia but generally 1500 ml per day is regarded as sufficient. However the challenges of meeting appropriate hydration continue to be reported. The aim of this study, using quantitative and qualitative methods was to gain a deeper understanding of the strategies required to understand hydration needs of people living with dementia. **Methods:** Quantitative measures of fluid intake were recorded over a period of five days in residents ( $n=18$ ) who were living in care homes. The mean age of the residents was 79 (104-58) years, 50% were women with a diagnosis of a range of dementia types. Qualitative research using a blend of nine focus groups and five semi structured interviews were conducted with all those involved in the care of people with dementia, including nurses, managers, chefs, care workers, family members, dietitians and speech and language therapists. Thematic analysis of transcripts enabled core themes to be explored. **Results:** The daily intake of fluid was  $1065 \pm 836$  ml (mean  $\pm 2$  standard deviations). Fifteen (83%) residents did not meet the recommended fluid intake. The qualitative themes highlighted ways to overcome poor fluid intake and included alternative ways to improve hydration; a person centred approach to delivering fluid with a recognition of psychosocial and cultural influences; communication between front-line staff and key healthcare professionals. **Conclusions:** Using this combined methodological approach, the results show that new strategies are needed to meet the hydration needs, with a person centred approach to care for people living with dementia. It is important to ensure all staff are well trained and competent to encourage sufficient fluid intake.