information, especially when the content came from a legitimate institute. The functional imaging data revealed activation of the insula, anterior cingulate cortex, and medial prefrontal cortex under such conditions. In addition, the results indicated activation in the frontal gyrus and dorsomedial prefrontal cortex when the information was accurate. **Conclusions:** Inaccurate information/knowledge obtained from different sources may lead to fallacies in the knowledge creation process. This study discusses factors influencing the knowledge creation process in healthcare. This study also reveals the importance of health information for self-treatment and for enhancing the quality of care. Dimoka, A. (2010). What does the brain tell us about trust and distrust? Evidence from a functional neuroimaging study. MIS Quarterly, 34(2), 373-396. Hrybouski, S., Aghamohammadi-Sereshki, A., Madan, C. R., Shafer, A. T., Baron, C. A., Seres, P., Beaulieu, C., Olsen, F., & Malykhin, N. V. (2016). Amygdala subnuclei response and connectivity during emotional processing. NeuroImage, 133, 98-110. Kitchens, B., Harle, C. A., & Li, S. (2014). Quality of health-related online search results. Decision Support Systems, 57, 454-462.

P1-570 **RACIAL/ETHNIC DIFFERENCES IN KNOWLEDGE ABOUT DEMENTIA AND TREATMENT**

Paige Lin[1], Joanna G. Emerson[1], Jessica D. Faul[2], *[1]Tufts Medical Center, Boston, MA, USA; [2]University of Michigan, Ann Arbor, MI, USA.* Contact e-mail: *plin@tuftsmedicalcenter.org*

Background: Although undiagnosed and untreated dementia is a problem across all racial and ethnic groups, it may be more common among African Americans and Hispanics than among whites. This study explored differences in knowledge about one's dementia status and treatment by race/ethnicity. **Methods:** Using national survey data from the 2014 Health and Retirement Study (HRS), we identified individuals age ≥65 years with dementia based on a validated algorithm developed by Crimmins and colleagues. For self-respondents, HRS assessed cognitive function using tests
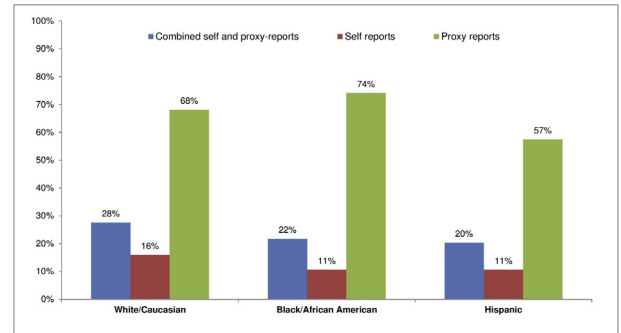

Figure 1. Percentage of dementia respondents reported being told by a doctor that they had Alzheimer's disease or dementia, by race/ethnicity and by respondent type (self vs. proxy reports).
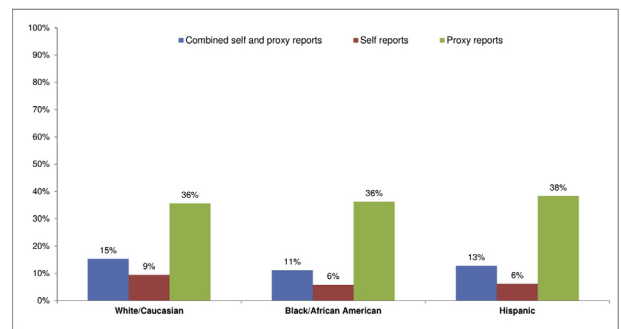

Figure 2. Percentage of dementia respondents reported taking medication for memory problem, by race/ethnicity and by respondent type (self vs. proxy reports).

adapted from the Telephone Interview for Cognitive Status, whereas for respondents represented by a proxy, HRS collected data on proxy's assessment of the person's memory, daily function,

Table 1
Sample characteristics of respondents age ≥65 years classified as having dementia (2014 Health and Retirement Study)

	Race/Ethnicity			
	White/Caucasian (N=719)	Black/African American (N=331)	Hispanic (N=226)	P-value[2]
Age, mean (95% CI)	82 (80.7-82.3)	78 (77.2-79.5)	77 (74.2-78.8)	**< 0.01**
Female	378 (52.6%)	204 (61.6%)	147 (65.0%)	**< 0.01**
Education				**< 0.01**
Less than high school	235 (32.7%)	188 (56.8%)	171 (75.7%)	
Highschoolgraduate/GED	266 (37.0%)	88 (26.5%)	37(16.4%)	
Some college	126 (17.5%)	41 (12.4%)	14 (6.2%)	
College and above	92 (12.8%)	14 (4.2%)	4 (1.8%)	
Number of overnights in a nursing home in past year, mean (95% CI)	5 (5.8-13.2)	1 (0.7-3.3)	0.3 (0.1-1.2)	**< 0.01**
Number of respondents using proxy reporter	160 (22.2%)	58 (17.5%)	47 (20.8%)	0.41
Cognitive score[1], mean (95% CI)				
Self reports	4 (4.1-4.5)	5 (4.3-4.7)	4 (3.8-4.4)	0.13
Proxy reports	9 (9.0-9.6)	9 (8.6-9.4)	9 (8.3-9.8)	0.08

All analyses adjusted for survey weighting.

[1]As determined by Crimmins et al. (2011) on a scale of 0-27 for self reports (dementia: 0-6; cognitive impairment no dementia: 7-11; normal: 12-27) and 0-11 for proxy reports (dementia: 6-11; cognitive impairment no dementia: 3-5; normal: 0-2). *Crimmins EM, Kim JK, Langa KM, Weir DR. Assessment of cognition using surveys and neuropsychological assessment: the Health and Retirement Study and the Aging, Demographics, and Memory Study. J Gerontol B Psychol Sci Soc Sci. 2011;66(suppl 1):i162-i171.*

[2]Wald Chi-Square test for categorical variables (sex, proxy reports, diagnosis, treatment), t-test for continuous variables (age, cognitive score).

and cognitive limitation. We classified individuals as having dementia if their scores ranged from 0-6 on a 27-point scale for self-reports, and 6-11 on an 11-point scale for proxy-reports. Among those identified as having dementia, we analyzed whether they recalled receiving an Alzheimer's disease (AD) or dementia diagnosis from their doctor and whether they were taking any medication for memory problem, stratified by race/ethnicity and respondent type (self vs. proxy) and adjusted for HRS sampling weights. **Results:** We identified 719 whites, 331 African Americans, and 226 Hispanics as having dementia. Cognitive scores were similar across racial/ethnic groups, regardless of whether they used a proxy. Overall, 28% of whites, 22% of African Americans, and 20% of Hispanics reported they were informed of the dementia diagnosis by their doctor. Knowledge about one's AD/dementia status was poor among self-respondents compared to proxy-respondents (White: 16% vs. 68%; African American: 11% vs. 74%; Hispanics: 11% vs. 57%). AD/dementia drug treatment rates were low (White: 15%; African American: 11%; Hispanic: 13%), especially among self-respondents compared to proxy-respondents (White: 9% vs. 36%; African American: 6% vs. 36%; Hispanics: 6% vs. 38%). **Conclusions:** Our findings suggest substantial discrepancies in knowledge about dementia status and treatment between self- and proxy-reports, especially among African Americans. In general, awareness of dementia and use of AD/dementia medications were low, particularly among self-respondents, possibly reflecting the impact of cognitive impairment on patients' ability to recall dementia diagnosis or differential access, utilization, or quality of care resulting in underdiagnosis.

P1-571   **INTERACTION BETWEEN PHASIC ALERTING AND EXECUTIVE CONTROL IN PATIENTS WITH MCI AND PATIENTS WITH EARLY DEMENTIA OF THE ALZHEIMER'S TYPE**

Pooja Rai, Indramani Lal Singh, Tara Singh, Trayambak Tiwari, Deepika Joshi, *Banaras Hindu University, Varanasi, India.* Contact e-mail: *pooja.rai.138@gmail.com*

Background: Dementia of Alzheimer's type (DAT) is a neurodegenerative disorder that is characterized by progressive cognitive deterioration and decline in activities of daily living (ADLs). Among the cognitive deficits, attention is the first non- memory domain to be affected in DAT. In particular, the neurocognitive research on DAT patients showed an impairment in performance on tasks requiring controlled inhibition i.e. executive control processes. Further, the ability to maintain alert is also affected in the early stages of DAT. These attentional processes influence each other and studies found that the executive control performance is inhibited by the alerting performance. **Methods:** Using attentional network paradigm, the present study examined the effect of phasic alertness on executive control system in patients with mild cognitive impairment (MCI), DAT and healthy controls. The Attentional Network Task (ANT) was used in this study, which comprised of a spatial cued reaction time task, to assess alerting and orienting and a flanker task to assess executive control. In this study an auditory and visual alerting cue was incorporated to compare the cross modal attentional processing on executive control network. The reaction time and performance accuracy of the participants were recorded. **Results:** The interaction between auditory alerting cue and executive control was significant. The executive control effect was significantly larger in auditory alerting cue conditions

than in visual alerting cue conditions. **Conclusions:** The analysis revealed that functioning of executive control network was improved under auditory alerting cue than visual alerting cue condition.

P1-572   **PUBLIC KNOWLEDGE OF LATE-LIFE COGNITIVE DECLINE AND DEMENTIA IN AN INTERNATIONAL SAMPLE**

Ryan Van Patten[1] and **Geoffrey Tremont**[2], [1]*Brown University, Providence, RI, USA;* [2]*Rhode Island Hospital & Alpert Medical School of Brown University, Neuropsychology Program Rhode Island Hospital, Providence, RI, USA.* Contact e-mail: *gtremont@lifespan.org*

Background: Dementia prevalence is increasing on a global scale. Assessing and enhancing public knowledge of age-related pathological cognitive decline may improve prevention efforts, early presentation for clinical evaluation/treatment, and care for the afflicted. No study to date has included a full-length,

Table 1
Sociodemographic characteristic

	N	Mean *(SD)* or %	DKAS Total Score (out of 54)
Age (in years)	3619	36.72 (12.51)	
Gender			
Male	1570	43.4%	24.74 (7.92)
Female	2036	56.3%	27.97 (8.67)
Prefer to self-describe	13	0.4%	29.69 (8.55)
Region of Origin			
United States	2819	77.9%	27.43 (8.38)
India	269	7.4%	19.96 (6.32)
Europe	199	5.5%	25.52 (8.17)
South/Central America & Mexico	92	2.5%	25.64 (7.02)
Canada	92	2.5%	26.41 (9.50)
Asia (not India)	73	2.0%	24.82 (10.00)
Africa	35	1.0%	20.60 (7.36)
Other	40	1.2%	
Educational Attainment			
1-8 years (attended elementary school)	1	<0.1%	24.00 (–)
9-11 years (no high school diploma)	26	0.7%	22.15 (8.81)
12 years (high school diploma)	275	7.6%	26.04 (7.64)
13 years (no college degree)	798	22.1%	25.97 (8.46
14-15 years (Associate's degree or equivalent)	435	12.0%	26.72 (9.17)
16-17 years (University degree or equivalent)	1367	37.8%	26.64 (8.21)
18-19 years (Master's degree or equivalent)	615	17.0%	27.03 (8.81)
20+ years (doctorate)	102	2.8%	29.79 (9.12)
Immediate family member diagnosed with dementia			
Yes	1493	41.3%	28.14 (8.20)
No	2126	58.7%	25.48 (8.54)
Completed a formal dementia education course/workshop			
Yes	266	7.4%	28.57 (10.27)
No	3353	92.6%	26.42 (8.33)
Provided professional healthcare for dementia patients			
Yes	542	15.0%	29.42 (9.51)
No	3077	85.0%	26.08 (8.22)