(IIV), a demonstrated sensitive indicator of cognitive functioning, to be used as an index of cognitive plasticity from an intervention. The current study evaluated whether older adults in a school volunteering program showed a reduction in IIV, compared to a low-activity control group over two years of exposure. Non-demented aging older adults (n = 336) participated in the Baltimore Experience Corps Trial, an evaluation of a volunteering program conducted at elementary schools designed to increase older adults’ physical, cognitive, and social engagement. Participants completed a cognitive battery that included a computerized Stroop task at baseline and after 12 and 24 months. Participants who complied at the 80th percentile or above showed a significant reduction in IIV at 24 months, with an additional trend of improved IIV with increased compliance to the treatment protocol, both at 12 months, and at 24 months. Men specifically also showed significant dose-dependent improvements after 12 months. The Experience Corps program resulted in an improvement in cognitive performance as measured by IIV. Analyzing previously collected data with non-traditional measures of cognition, such as IIV, may be a potentially fruitful and cost-effective method for understanding how interventions impact cognition in aging populations.

THE EFFECT OF COGNITIVE TESTING ON STATE ANXIETY AND CORTISOL REACTIVITY IN YOUNGER AND OLDER ADULTS

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Although it is well established that stress is negatively associated with cognitive functioning, less is known about age differences in the effects of stressors and anxiety on state anxiety and physiological reactivity (i.e., changes in cortisol). The current study examined state anxiety and cortisol reactivity during a series of cognitive tasks in a sample of younger (n=26) and older (n=29) adults. Participants completed the State-Trait Anxiety Inventory prior to cognitive testing and provided six salivary cortisol samples throughout one testing session: two cortisol samples prior to cognitive testing, three samples during testing, and one sample after testing. Six cognitive tasks were administered that measured attention span, declarative memory, and processing speed. Results indicated a significant interaction effect of age by time with younger adults’ cortisol linearly decreasing during the testing session and older adults’ cortisol showing a quadratic trend. A second interaction was found between age and state anxiety whereby older adults who reported more anxiety had higher cortisol levels during the cognitive testing session than both the older adults who reported low levels of anxiety and the younger adults. Only age (not cortisol or anxiety) was significantly related to cognitive performance. Results from this study suggest that standard cognitive testing could be anxiety producing for older adults, particularly for those who are already anxious. Future investigations should examine age-related differences in the processes linking anxiety and cortisol to specific types of performance, such as memory and attention.

SESSION 3355 (POSTER)

EMERGING MODELS OF CARE: THE IMPACT OF PHARMACIST-LED MEDICATION MANAGEMENT IN A TRANSITIONAL CARE PROGRAM

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Transitional care programs have emerged as successful models of care in which to reduce cost and improve health outcomes. However, few transitional care models have directly incorporated the expertise of the pharmacist as an integral member of the care coordination team. Therein lies an inherent limitation of many community-based transitional care programs, the underutilization of pharmacist during all stages of the care transition process. In 2013, the Hampton Roads Care Transitions Project (HRCTP), a partnership between Senior Services of Southeastern Virginia Area Agency on Aging in Norfolk, VA and Hampton University School of Pharmacy, was established. The goal of the HRCTP is to provide medication management services to reduce preventable hospital readmissions for adults 60 years of age and older with targeted diagnoses. Pharmacists work in collaboration with social workers who act as HRCTP care transition coaches. Between May 2017-October 2018, 678 patients were enrolled in the HRCTP. The hospital readmission rate among patients with targeted diagnoses was reduced by 55.3% with an absolute percentage point reduction of 9.9% and estimated savings amount per avoided readmission of $14,400. Patients who participated in the HRCTP showed a 14% increase in the Patient Activation Assessment indicating an improvement in self-managing efficacy. 93% of patients/caregivers indicated they felt more confident in their ability to manage their health, and 91% expressed satisfaction with the program. The program has proven effective in assisting seniors to remain in their home, reducing hospitalizations, promoting health, increasing patient satisfaction, and reducing healthcare cost.

A SIMPLE INTERVENTION TO REDUCE ANTICHOLINERGIC DRUG USE WHILE ATTENDING A GERIATRIC DAY HOSPITAL

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Attendance at a Geriatric Day Hospital has previously been shown to reduce both the overall number of medications and the number of anticholinergic medications of patients. In the present study, patients enrolled in a Geriatric Day Hospital program from January to February 2019 were divided into a control and intervention group. Anticholinergic medications in the intervention group were flagged by highlighting them in the patient chart and alerting the attending clinician, whereas no alerts were provided in the control group. Anticholinergic load was calculated using the Anticholinergic Cognitive Burden (ACB) and Drug Burden Index (DBI) scores. In comparing admit versus discharge medications in the intervention group, both the mean number of overall medications...
(10 vs. 9.7) and anticholinergic medications (3.5 vs. 3.1) was reduced; this was not the case in the control group, where the mean number of overall medications remained the same (11.92) and the mean number of anticholinergic medications increased (3.83 vs. 3.92). More significantly, in comparing admit versus discharge scores, both the mean ACB and DBI scores were reduced in the intervention group, but in the control group both the ACB and DBI scores either remained the same or increased at the time of discharge. This clearly shows that a simple intervention (highlighting anticholinergic medications in the patient chart) can have a clinically beneficial outcome of reducing these harmful medications in patients. With approximately 50% of the older population taking at least one anticholinergic drug, the importance of reducing anticholinergic burden cannot be overemphasized.

**THE OPIOID EPIDEMIC IN LONG-TERM CARE: A STAFF PERSPECTIVE**

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Opioid-based analgesic therapy is a common treatment for moderate to severe pain among long term care (LTC) residents. It has been estimated that 60% of LTC residents have an opioid prescription. Of these, 14% use opioids as part of a long term pain management strategy. LTC residents are particularly vulnerable to opioid misuse, exhibiting higher rates of adverse drug events. However, addressing pain, polypharmacological needs and resident well-being in the LTC setting is challenging. More research and education regarding opioid use in LTC is needed. The Utah Geriatric Education Consortium conducted interprofessional focus groups with LTC partners to 1) determine educational needs of staff regarding opioid use, and 2) gather qualitative data about the pain management experiences of staff when working with residents and families. Staff identified the following training needs: pain manifestation and assessment; certified nurse assistant education on opioid use; non-pharmacological options for pain management. Review of staff’s perception of the intersection of opioids, family and staff in a LTC setting revealed that 1) family is concerned about opioid use; 2) conversely, staff may not see opioid use as a problem; and 3) non-pharmacological options for pain management are often costly and unavailable to those in LTC. Identifying educational needs of LTC staff will help guide the development of educational materials and provide baseline data for future assessments of the impact of opioid education on long-term care patient outcomes.

**TRENDS IN OPIOID USE IN LONG-TERM CARE NURSING HOME RESIDENTS WITH DEMENTIA**

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We examined opioid use in long-term care nursing home residents with dementia. This retrospective cohort study used Minimum Data Set linked Medicare data, 2011-2016, and included long-term care episodes for residents 65+ years who survived 100+ days each year (592,211 episodes for 256,207 residents). Cognitive status at first annual assessment was classified as none/mild, moderate and severe impairment. Overall opioid use, prolonged opioid use (prescription supply 90+ days) and long-acting opioid use were identified from Medicare part D. Descriptive statistics were used to describe opioid use by cognitive impairment. Cochran Armitage trends test was used to determine trends in opioid use. 114,622 (19%) patients had severe and 129,257 (22%) had moderate dementia. Overall opioid (none/mild=15.4%, moderate=13.9%, severe=9%), prolonged opioid (none/mild=5.2%, moderate=4.5%, severe=3.2%) and long-acting opioid use (none/mild=1.1%, moderate=0.9%, severe=0.3%) were lower in patients with advanced dementia. Opioid use was significantly higher in females and Whites and varied by states. Substantial increase was found in overall opioid and prolonged opioid use from 2011 to 2016, with greater increase in none/mild and moderate dementia patients. For example, prolonged opioid use increased by 69% in none/mild and 71% in moderate dementia patients compared to 52% in severe dementia patients (p<0.0001). Long-acting opioid use decreased, with a greater decline in none/mild (69%) and moderate (71%) dementia patients compared to severe dementia patients (58%) (p<0.0001). Contrary to decreasing opioid use in community setting, overall and prolonged opioid use increased in nursing home residents. Future studies should identify the reasons behind increased use.

**CHALLENGES FACED BY OLDER PERSONS IN USING PRESCRIPTION MEDICATION LABELS: WHAT NEEDS TO CHANGE?**

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In Singapore, while many older people cannot read English, prescription medication labels (PMLs) are predominantly dispensed in English. This qualitative study documented the challenges faced and solutions employed by users (i.e. older Singaporeans) and dispensers (i.e. pharmacy staff) of PMLs. In total, 30 in-depth interviews were conducted; 20 were equally divided between older Singaporeans (≥60 years) who could read English and those with limited/no English reading ability, and 10 were conducted with pharmacy staff across 6 polyclinics. The audio-taped interviews were transcribed verbatim and analysed thematically. The interviews with older Singaporeans and pharmacy staff revealed similar challenges in using PMLs. The first challenge related to reading and understanding PMLs by older people, mainly due to their limited English proficiency (LEP) or illiteracy. Consequently, older Singaporeans often relied on family members, domestic workers or pharmacy staff to help them interpret PMLs. Specifically, to address LEP, pharmacy staff reported translating PML instructions verbally and also handwriting them on PMLs. For illiterate patients, pharmacy staff reported drawing illustrations on PMLs to communicate key medication information. The second challenge related to PML readability, due to small font size. To address this, pharmacy staff routinely re-wrote medication information on PMLs in larger handwriting. Such improvised solutions by pharmacy staff to address the challenges faced by older Singaporeans in using PMLs indicate a pressing need for system-level improvements to PMLs. Improvements such as standardised and legible bilingual medication instructions and/or pictograms would appreciably facilitate medication