

(95% CI: 2857-2913.7). In an adjusted model, neighborhood characteristics had a significant association with dementia incidence. Rural and small urban census tracts had 62% (IRR=0.38; 95% CI= 0.27-0.54) and 58% (IRR=0.42; 95% CI= 0.29-0.60) lower dementia incidence, respectively, among ≥ 50 years old compared to urban census tracts while adjusting for neighborhood median-household income, racial composition, commute time, and age structure. The results from this study show a negative relationship between rural neighborhoods and dementia, contrary to previous findings. However, lower access to care in rural neighborhoods can result in lower detection rates and thus could present a reporting bias. Future research should investigate additional census-tract neighborhood characteristics (e.g. green space, pollution rates or psychosocial stress) that contribute to lower dementia rates in rural areas.

HIGH THROUGHPUT YEAST REPLICATIVE LIFESPAN SCREEN UNCOVERS HISTONE DEACETYLASE HDA AS NOVEL REGULATOR OF AGING

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In this work, we set out to develop a high throughput screening method, SEBYL (SEquencing Based Yeast replicative Lifespan screen), in order to identify new aging regulators in budding yeast. By utilizing SEBYL on yeast knockout collection, we were able to identify 285 long-lived gene deletions, of which a significant portion was proven to have extended lifespan by previous classical experiments. To demonstrate the ability of our method to discover new genes and pathways involved in aging process, we focused on characterizing one newly identified long-lived candidate emerged from the screening, histone deacetylase complex HDA, and found it regulates aging through mediating stress response pathways, especially DNA damage stress response. Presence of HDA complex inhibits expression of trehalose metabolism genes, which act as stress protectant. When HDA complex is mutated, trehalose genes are de-repressed, enhancing stress response and eventually promotes longevity. In summary, we conclude SEBYL to be time and energy saving, robust, and suitable for discovery of aging regulating genes using various preexisting yeast mutant collection resource.

THE EFFICACY OF CASE-BASED INSTRUCTION ON STUDENT ATTITUDES TOWARDS PAIN AND OPIOID RISK ASSESSMENT IN OLDER ADULTS

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A survey of US medical schools found that only 10-12 hours of the 4 year curriculum are dedicated to instruction in pain management in older adults. Since chronic pain afflicts 100 million Americans, and older adults have a higher risk of prescription medication misuse, there is urgency regarding proper education. This study evaluates the success of case-based instruction on the topics of pain management and opioid risk assessment, with a goal of increasing instructional

hours in a format other than didactic. 200 fourth-year medical students were split into groups of 20, with 2 instructors in each room. A survey was administered pre/post workshop asking participants to rate 10 statements using a Likert scale. The 2 hour workshop involved case studies to work through while using a created pain instructional card. The case-based instruction format demonstrated high efficacy in shaping the beliefs and personal evaluations of medical students. Prior to the workshop, only 34% of students were positive about their pain assessment abilities. 9.5% were positive about their opioid conversion skills, and only 4% were positive about opioid risk assessment skills. After the workshop, these positive evaluations increased to 97%, 95%, and 92% respectively. The McNemar test proved these findings to be statistically significant ($p < .0001$). Case-based instruction with small-group discussion is a reliable tool in teaching medical trainees about pain management and opioid risk assessment in adults aged 65 and older. This workshop needs to be run with geriatric/palliative care residents to evaluate clinical incorporation of session concepts through resident charting.

CURIOSITY TOWARDS ROBOT: THE ROLE OF AGE AND PERSONAL RELEVANCE

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Being curious has various physical, social and psychological benefits. However, theories like the socioemotional selectivity theory suggest that information seeking goals tend to be overshadowed by emotionally meaningful goals with age. Personality and social psychology research also found consistent decline of curiosity in later adulthood. In contrast, selective engagement theory propose that people simply become more selective on where they allocate their cognitive resources as they age. Particularly, older adults tend to invest in things that have personal relevance. Yet, few studies have explored the interaction between age and personal relevance in the context of information seeking tendencies. We conducted a pre-test-post-test experiment with 50 younger (age 19-34) and 50 older adults (age 60-78). Participants were invited to learn about a robot (Vector by Anki) and freely interact with the robot for about 30 minutes. Questionnaires were filled before and after the interaction. Our results confirmed previous findings that older adults showed lower level of trait curiosity than younger adults ($F(1, 98)=21.94$, $p < .001$, $\Delta R^2 = .$). However, older adults actually showed higher level of state curiosity towards robot than their younger counterparts ($F(1, 96)=21.94$, $p < .001$). Moreover, there was a marginally significant interaction effect of personal relevance ($p = .06$). Tukey's post-hoc test revealed that older adults who perceived increased relevance ($M=5.39$) after the interaction were significantly more curious than younger adults who also perceived increased relevance ($M=4.51$, $p = .02$), but there was no significant age difference when they perceived decreased relevance. Present study offers insights on promoting curiosity among older adults.

COST-EFFECTIVENESS ANALYSIS OF THE COLLABORATIVE STEPPED CARE INTERVENTION FOR LATE-LIFE DEPRESSION

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Late-life depression is a burden on society because it is costly and have a significant adverse effect on the quality of life. The aim of this study is to evaluate the cost-effectiveness of the collaborative stepped care intervention for depression among community-dwelling older adults compared to care as usual from a societal perspective. The intervention was piloted from 2016-2019 in Hong Kong. The study used a two-armed quasi-experimental design. Eventually, 412 older people were included (314 collaborative stepped care, 98 care as usual). Baseline measures and 12-month follow-up measures were assessed using questionnaires. We applied the 5-level EQ-5D version (EQ-5D-5L) and the Client Service Receipt Inventory (CSRI) respectively measuring quality-adjusted life-year (QALY) and health care utilization. The average annual direct medical cost in the intervention group was USD 6,589 (95% C.I., 4,979 to 8,199) compared to US\$ 6,167 (95% C.I., 3,702 to 8,631) in the care as usual group. The average QALYs gained was 0.036 higher in the collaborative stepped care group, leading to an incremental cost-effectiveness ratio (ICER) of US\$ 11,722 per QALY, lower than the cost-effectiveness threshold suggested by The National Institute for Health and Clinical Excellence. The study showed that collaborative stepped care was a cost-effective intervention for late-life depression over service as usual.

THE RELATIONSHIP OF FRAILTY, FEAR OF FALLING, AND DEPRESSION WITH HRQOL IN HIGH-RISK OLDER ADULTS

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One in four older adults fall every year. Falls result in negative outcomes including decreased health-related quality of life (HRQoL). Frailty, fear of falling, depression, and HRQoL are not routinely screened in high-risk community-dwelling older adults. Continued study of modifiable fall risk factors is warranted due to varied reported prevalence rates, inconsistent definitions and the persistent high rate of falls resulting in poor HRQoL. The purpose of the study was to determine the relationship between frailty, fear of falling, and depression with physical and mental functioning and well-being measures of HRQoL in community-dwelling older adults 55 years of age and older. A cross-sectional correlational design and chart review were conducted. The sample consisted of 84 primarily African American (81%) nursing home eligible members of the Program for All-Inclusive Care for the Elderly (PACE) program. Data were analyzed with correlational statistics, multiple linear, and hierarchical regression models. Physical functioning and well-being measures were significantly decreased when compared to the general population. Increased frailty, fear of falling, and depression were associated with decreased physical and mental well-being. In the regression model, frailty and fear of falling were significant predictors of decreased physical functioning and well-being, and depression was a significant predictor of decreased mental functioning and well-being. This study provides clarification of the relationship between frailty, fear of falling, and depression with HRQoL in high-risk older

adults. Screening for common modifiable risk factors can assist in the development of targeted interventions and treatments to improve HRQoL in high-risk older adults.

PREDICTORS OF HEALTH-RELATED QUALITY OF LIFE AND RECOVERY AMONG OLDER ADULTS WITH SERIOUS MENTAL ILLNESS

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Older adults with serious mental illness (i.e., schizophrenia spectrum disorders and affective psychoses) exhibit marked impairments across medical, cognitive, and psychiatric domains. The present study examined predictors of health-related quality-of-life and mental health recovery in this population. Participants (N=211) were ages 50 and older with a chart diagnosis of serious mental illness and a co-occurring medical condition, engaged in outpatient mental health services at a study site. Participants completed a battery of assessments including subtests from the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS), the 24-Item Behavior and Symptom Identification Scale (BASIS-24), the 12-Item Short-Form Health Survey (SF-12), and the Maryland Assessment of Recovery Scale (MARS). Multiple linear regression analyses, with age, race, gender, and BMI as covariates, examined number of current medical conditions, RBANS, and BASIS as predictors of quality-of-life and recovery. Significant predictors of physical health-related quality-of-life (R-squared=.298, $F(9,182)=8.57$, $p<.0001$) were number of medical conditions ($\beta=-1.70$, $p<.0001$), BASIS-Depression/Functioning ($\beta=-4.84$, $p<.0001$), and BASIS-Psychosis ($\beta=2.39$, $p<.0008$). Significant predictors of mental health-related quality-of-life (R-squared=.575, $F(9,182)=27.37$, $p<.0001$) were RBANS ($\beta=0.03$, $p=.05$), BASIS-Depression/Functioning ($\beta=-6.49$, $p<.0001$), BASIS-Relationships ($\beta=-3.17$, $p<.0001$), and BASIS-Psychosis ($\beta=-1.30$, $p=.03$). Significant predictors of MARS (R-squared=.434, $F(9,183)=15.56$, $p<.0001$) were BASIS-Depression/Functioning ($\beta=-4.68$, $p=.002$) and BASIS-Relationships ($\beta=-9.44$, $p<.0001$). To promote holistic recovery among older adults with serious mental illness, integrated interventions are required. For example, to improve physical health-related quality-of-life, one should target depression and psychotic symptoms as well as medical illness burden. To improve mental health-related quality-of-life, depression symptoms and interpersonal functioning may be key targets, as well as neurocognitive function.

BROODING MODERATES THE RELATIONSHIP BETWEEN CEREBROVASCULAR BURDEN AND VASCULAR DEPRESSION

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Objective: The vascular depression hypothesis posits that cerebrovascular burden confers risk for late-life depression. Though neuroanatomical correlates of vascular depression (prefrontal white matter hyperintensities) are well established,