

homebound older adults utilized more health services utilization than non-frail homebound and were twice as likely to be hospitalized (49.8% versus 28.0%, $p=0.004$).

FRAILTY PHENOTYPE AND HEALTHCARE COSTS IN OLDER COMMUNITY-DWELLING MEN: THE MROS STUDY

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To determine the association of the frailty phenotype with subsequent healthcare costs, we studied 1514 men (mean age 79.3 years) participating in the 2007-2009 exam linked with their Medicare claims data. The frailty phenotype (5 components) was categorized as robust, pre-frail or frail. Multimorbidity and a frailty indicator (approximating the deficit accumulation index) were derived from claims data. Functional limitations were assessed by asking about difficulty performing 5 IADL. Total direct healthcare costs were ascertained during 36 months following the exam. Mean annualized costs (2018 dollars) was \$5707 among robust, \$8964 among pre-frail and \$20,027 among frail men. Compared with robust, pre-frailty and frailty were each associated with higher costs after accounting for demographics, multimorbidity, functional limitations and the frailty indicator (cost ratio 1.18 [1.02-1.36] among pre-frail and 1.87 [1.47-2.39] among frail). Findings suggest that assessment of the phenotype may improve identification of individuals at increased risk of costly care.

FRAILTY PHENOTYPE AND HEALTHCARE COSTS IN WOMEN IN LATE LIFE: THE SOF STUDY

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We used data from 1324 women (mean age 83) at the 2002-2004 exam linked with their Medicare claims to determine the association of the frailty phenotype with healthcare costs. The frailty phenotype was categorized as robust, pre-frail or frail. Multimorbidity and a frailty indicator (approximating the deficit accumulation index) were derived from claims. Functional limitations were assessed by asking about difficulty performing IADL. Total direct healthcare costs were ascertained during 36 months following the exam. Compared with robust, pre-frailty and frailty were associated with higher costs after accounting for demographics, multimorbidity, functional limitations and the frailty indicator (cost ratio 1.37 [1.10-1.71] among pre-frail and 1.63 [1.28-2.08] among frail). Discrimination of high-cost (top decile) women was improved by adding the phenotype and functional limitations to a model containing demographics and the claims-based measures. Findings suggest that assessment of the phenotype may improve identification of individuals at higher risk of costly care.

SESSION 7150 (SYMPOSIUM)

ESPO/ HEALTH SCIENCES SECTION SYMPOSIUM: LEVERAGING OLDER ADULTS' PERCEPTIONS OF CHRONIC ILLNESS TO IMPROVE CARE

Chair: Anyah Prasad

Co-Chair: Brianna Morgan

Discussant: Mary Naylor

In advanced years of life comorbidity of chronic illnesses is a common phenomenon. While chronic illnesses have been documented to impact overall quality of life, morbidity, and mortality, older adults may develop psychological resources in the years of coping and managing their illnesses. These psychological resources can be influenced by individual perceptions and context as people age, and include concepts such as psychological resilience, inner strength, subjective age, and illness perception. This symposium brings together emerging health science scholars' work on exploring and leveraging these psychological resources to improve care. Amy Ketcham will present a systematic review of psychological resilience and depression in adults with cardiac disease. Brianna Morgan will present a concept analysis exploring the nature of inner strength in people aging with serious illness and cognitive impairment. Anyah Prasad will present results examining the association between chronic illnesses and subjective age and discuss its clinical relevance. Eleanor Rivera will explore illness perception phenotypes in a longitudinal cohort study of older adults with chronic kidney disease. Together, the perspectives shared in this symposium improve understanding of and indicate ways to move toward person-centered and contextual clinical models of care in the management of chronic illnesses among older adults. In addition, the discussant will engage in a dynamic conversation about psychological resources in later life and the role these projects have played in advancing the presenters along their academic trajectories.

OLDER ADULTS' SUBJECTIVE AGE AS A POTENTIAL PSYCHOLOGICAL RESOURCE IN CLINICAL MANAGEMENT OF CHRONIC ILLNESSES

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Meghan Hendricksen,² and Natalie Shellito,¹

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Subject age is predictive of future morbidity and mortality and can be potentially viewed as a psychological resource. However, there seems to be a reciprocal relationship between subjective age and health. In a series of analyses, we demonstrated that various measures of health status such as number of chronic illnesses, self-rated health and sensory impairment have an adverse association with older adults' subjective age. Specifically, chronic illnesses seem to have a period effect and age effect. Living with chronic illness over a period of time seems to attenuate its association with subjective age. Similarly, the association between chronic illnesses and subjective age gets weaker with increase in older

adults' chronological age. Therefore, asking those living with chronic health conditions and specifically younger older adults about their subjective age and providing appropriate resources, counseling and reassurance about chronic illness management may prevent the downstream negative health effects of increased subjective age.

CHARACTERIZING ILLNESS PERCEPTION PHENOTYPES IN OLDER ADULTS WITH CHRONIC KIDNEY DISEASE

Eleanor Rivera,¹ Karen Hirschman,² and Raymond Townsend,¹ 1. *University of Pennsylvania, Philadelphia, Pennsylvania, United States*, 2. *NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania, United States*

An individual's understanding of their chronic illness (illness perception) is a psychological resource that has an impact on coping and self-management behaviors. Our previous study identified illness perception phenotypes (overall patterns of illness perceptions) in a sample of older adults with heart failure, COPD, and chronic kidney disease. These phenotypes were associated with perceived self-management ability (patient activation) and recent hospitalizations. To further characterize the illness perception phenotypes we focused on older adults with chronic kidney disease, analyzing illness perception data along with potential covariates from the multi-center longitudinal Chronic Renal Insufficiency Cohort study (CRIC). Covariates include sociodemographics, disease parameters, personality type, disease knowledge, and treatment adherence. While personality type was associated with illness perception phenotype, disease knowledge and treatment adherence were not. We have also conducted qualitative analyses of in-depth interviews. These results will inform the development of a pilot intervention incorporating illness perception information into the clinical setting.

EXPLORING INNER STRENGTH IN PEOPLE AGING WITH SERIOUS ILLNESS AND COGNITIVE IMPAIRMENT

Brianna Morgan, *University of Pennsylvania, Philadelphia, Pennsylvania, United States*

Inner strength is a psychological resource that supports people as they move through challenging life events. Understanding how people living with serious illness conceptualize inner strength is key in informing person-centered healthcare. This concept analysis used dimensional analysis methods to explore the nature of inner strength in people aging with serious illness to define a situation specific theory. 1212 abstracts and articles from the published literature were reviewed. 30 articles were included and analyzed as data sources. The resulting explanatory matrix conceptualized inner strength in people as an inward and outward process of "meeting me" – an authentic version of oneself – in the context of shifting health. Of note, while other serious illnesses were represented, no literature focused on dementia. Understanding inner strength in people with dementia is the next step for further inquiry. A pilot study exploring feasibility and informing further research is planned.

ASSOCIATION OF PSYCHOLOGICAL RESILIENCE AND DEPRESSIVE SYMPTOMS IN ADULTS WITH CARDIAC DISEASE

Amy Ketcham, Austin Matus, and Barbara Riegel, *University of Pennsylvania, Philadelphia, Pennsylvania, United States*

Depressive symptoms predict hospitalization and mortality in adults with cardiac disease. Psychological resilience may protect against depressive symptoms, but benefits are not yet conclusive. We conducted a systematic review to examine the association between resilience and depressive symptoms in adults with cardiac disease. Seven databases were searched from inception to December 2019 using the search terms "cardiac disease," "depressive symptoms," "depression," and "resilience." The 623 articles identified were narrowed through title, abstract and full-text review leaving 13 studies for final analysis. Resilience and depressive symptoms were inversely related in 10 of 13 studies. The three studies with poor quality sampling techniques or significant loss to follow-up found null results. The major gap identified in the literature was poor understanding of the longitudinal pattern between resilience and depressive symptoms. If the direction of causality functions as expected in longitudinal research, optimizing resilience could help attenuate depressive symptoms.

SESSION 7155 (SYMPOSIUM)

LIFELONG ENGAGEMENT: THE ROLE OF COGNITIVE RESERVE AND PHYSICAL HEALTH IN VERY LATE LIFE

Chair: Peter Martin

Co-Chair: Bradley Willcox

Discussant: D. Craig Willcox

At the end of a very long life, older adults often experience a significant decline in cognitive function. However, there are older adults who have maintained high levels of cognition and physical health. The purpose of this symposium is to illuminate interdisciplinary findings of cognitive engagement with late-life benefits of cognitive functioning and physical health. Components of cognitive reserve include sociodemographic variables (e.g., education, occupational complexity and responsibility), psychosocial variables (e.g., engaged life style and activity) and physical and genetic reserve (e.g., strength, APOE4). Based on three major research studies (the Japanese SONIC study; the Honolulu Asia Aging Study, HAAS; and the Georgia Centenarian Study, GCS), we highlight important aspects of building cognitive reserve and the implications for cognitive and physical health. The first presentation evaluates the importance of work complexity as a predictor of cognitive and physical health among participants of the SONIC study. Multiple group analyses yielded strong associations of occupational complexity with cognitive functioning for men. The second presentation reports logistic regression findings from the HAAS including education, strength and genetic markers, as well as mental health and their relatedness to cognitive abilities and physical health. The final presentation evaluates a structural equation model from the GCS, highlighting the interrelationship of