

to which custodial grandparenting status influences marital affectual solidarity, depressive symptoms, life satisfaction, and perceived stress. Measures included the Center for Epidemiological Studies Depression Index, Spousal Affectual Solidarity, Satisfaction with Life Scale, and Perceived Stress Scale. Marital affectual solidarity was significantly related to custodial status and psychological well-being, and there were significant differences in marital relationship quality and psychological well-being between custodial grandparents and non-custodial grandparents. However, custodial status failed to moderate the relation between marital affectual solidarity and mental health. Although other factors surrounding custodial grandparents likely affect their marital relationship and mental health, these results suggest that grandparents raising grandchildren are under particular strain in their marriages and are in need of targeted interventions to ameliorate stress and depressive symptoms. These findings will inform the need for more research and supportive educational programs on family relationships and the psychological health of custodial grandparents.

SEQUENTIAL IMPLEMENTATION AS A LEARNING HEALTH ORGANIZATION: THE EQUIPPED GERIATRIC MEDICATION SAFETY MODEL

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A learning health organization (LHO) is one that systematically integrates internal data and experience with external evidence to improve internal healthcare practice. Yet collaborative research networks implementing evidence-based interventions across sites with the goal of widespread dissemination are also effectively LHOs. The EQUIPPED (Enhancing Quality of Prescribing Practices for Older Adults Discharged from the Emergency Department) network formed to address an important public health issue: potentially inappropriate medications (PIMs) prescribed to older adults at discharge from hospital Emergency Departments (ED). EDs nationwide serve increasing numbers of older adults but lack clinical decision support to avoid prescribing PIMs associated with adverse events including hospitalization and death. The EQUIPPED geriatric safety program was adapted from the VA and implemented sequentially at three different academic institutions sharing the same electronic health record (Epic)(AHRQ R18HS24499). Implementation challenges, solutions, and innovations informed successive iterations. Using the Replicating Effective Programs framework, we conducted a process evaluation using data from implementation team focus groups (n=3), meeting minutes (n=98 hours), and organizational profiles (n =3) to understand how organizations working together within a research network build an intervention package for program scale-up. We present structural characteristics of the three organizations, implementation steps as they developed across three

sites, and the resulting process protocol and a prototype toolkit. Lessons learned include having multiple internal champions at the intervention site, observing workflow pre-intervention, and streamlining data collection with a relational database and visualization software. Insights from the EQUIPPED experience can serve as a model for other systems and collaborative networks.

LIFESPAN AGE-RELATED DIFFERENCES IN THE REGIONAL WHITE MATTER MICROSTRUCTURE OF THE HUMAN CORPUS CALLOSUM

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The corpus callosum (CC) connects homologous cortical structures across hemispheres and is the largest white matter tract in the human brain. Post-mortem studies suggest that CC myelination begins in infancy, reaches a plateau in the middle age, and declines in the later years. The latter is accompanied by myelin disruption and reduction in fiber density and diameter, i.e. changes in intra-/extracellular water space. We used multi-echo T2 imaging to estimate, via multi-exponential T2 relaxation of water, the myelin water fraction (MWF), a direct proxy for myelin content, and geometric mean T2 (geomT2IEW) that reflects water in the intra-/extracellular space, to investigate age differences in five CC regions covering its anterior to posterior span in 395 healthy individuals (7-85 years; 161M+235F). The general linear model analysis of MWF showed main effects of age and age-squared conditioned on interactions by CC region. Univariate polynomial regressions on three age groups (7-29, 30-59, and 60-85 years) revealed the overall quadratic association between age and MWF as mainly driven by the positive linear relationship in the youngest group and minimal differences in the remainder of the lifespan, save for two weak negative linear associations in the anterior/middle CC body. With geomT2, a main linear effect of age, and significant interactions between age and age-squared by region were observed. The positive linear association was especially prominent in the regions with greater fiber density. The results are consistent with CC myelination into adulthood and decreased axonal density and diameter but not prominent myelin degeneration in elderly individuals.

A MUSIC AND MINDFULNESS INTERVENTION FOR PERSONS WITH DEMENTIA AND THEIR CAREGIVERS

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The number of older adults with Alzheimer's Dementia is projected to increase by 28.6% in Florida by 2025. Cost-effective non-pharmacological interventions targeting both persons with dementia (PWD) and their family caregivers (FCs) are urgently needed. This small pilot study tested the