P38: Associations between occupation, retirement age and 20-year cognitive decline: The Atherosclerosis Risk in Communities (ARIC) Study

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Objectives: Activities that require active thinking, like occupations, may influence cognitive function and its change over time. Associations between retirement and dementia risk have been reported, however the role of retirement age in these associations is unclear. We assessed associations of occupation and retirement age with cognitive decline in the US community-based Atherosclerosis Risk in Communities (ARIC) cohort.

Methods: We included 14,090 ARIC participants, followed for changes in cognition during up to 21 years. Information on current or most recent occupation was collected at ARIC baseline (1987–1989; participants aged 45–64 years) and categorized according to the 1980 US Census protocols and the Nam-Powers-Boyd occupational status score. Follow-up data on retirement was collected during 1999–2007 and classified as retired versus not retired at age 70. Trajectories of global cognitive factor scores from ARIC visit 2 (1990–1992) to visit 5 (2011–2013) were presented, and associations with occupation and age at retirement were studied using generalized estimating equation models, stratified by race and sex, and adjusted for demographics and comorbidities.

Results: Mean age (SD) at first cognitive assessment was 57.0 (5.72) years. Higher occupational status and white-collar occupations were significantly associated with higher cognitive function at baseline. Occupation was associated with cognitive decline over 21 years only in women, and the direction of the effect on cognitive function differed between black and white women: in white women, the decline in cognitive function was greater in homemakers and low status occupations, whereas in black women, less decline was found in homemakers and low (compared to high) occupational status. Interestingly, retirement on or before age 70 was associated with less 21-year cognitive decline in all race-sex strata, except for black women.

Conclusions: Associations between occupation, retirement age and cognitive function substantially differed by race and sex. Further research should explore reasons for the observed associations and race-sex differences.

P39: The Effect of Home-Visit Nursing in Preventing Readmission of Patients with Mental Disorders to Psychiatric Hospitals: A Literature Review

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Background: The transition from hospital to community for psychiatric patients is often challenging due to difficulties in managing community life after discharge and receiving consistent mental health treatment (Marianne, 2019). Some systematic reviews reported on interventions to improve discharge from acute adult mental health inpatient care to the community (Tyler, 2019) and the effectiveness of crisis resolution/home treatment teams for older people with mental health problems (Toot, 2011). However, these reviews revealed inadequate evidence for nursing interventions in community. In Japan, home-visit nursing is considered to play an important role for people with mental disorders living in community.

This review aims to provide an overview of the effectiveness of home-visit nursing in supporting community life for individuals with mental disorders discharged from psychiatric hospitals.