

Leisure, Domestic or Professional Activities so as to Prevent Cognitive Decline: Results FreLE Longitudinal Study

Authors : Caroline Dupre, David Hupin, Christ Goumou, Francois Belan, Frederic Roche, Thomas Celarier, Bienvenu Bongue

Abstract : Background: Previous cohorts have been notably criticized for not studying the different type of physical activity and not investigating household activities. The objective of this work was to analyse the relationship between physical activity and cognitive decline in older people living in the community. Impact of type of physical activity on the results has been realised. Methods: The study used data from the longitudinal and observational study , FrèLE (FRagility: Longitudinal Study of Expressions). The collected data included: socio-demographic variables, lifestyle, and health status (frailty, comorbidities, cognitive status, depression). Cognitive decline was assessed by using: Mini-Mental State Examination (MMSE) and Montreal Cognitive Assessment (MoCA). Physical activity was assessed by the Physical Activity Scale for the Elderly (PASE). This tool is structured in three sections: the leisure activity, domestic activity, and professional activity. Logistic regressions and proportional hazards regression models (Cox) were used to estimate the risk of cognitive disorders. Results: At baseline, the prevalence of cognitive disorders was 6.9% according to MMSE. In total, 1167 participants without cognitive disorders were included in the analysis. The mean age was 77.4 years, and 52.1% of the participants were women. After a 2 years long follow-up, we found cognitive disorders on 53 participants (4.5%). Physical activity at baseline is lower in older adults for whom cognitive decline was observed after two years of follow-up. Subclass analyses showed that leisure and domestic activities were associated with cognitive decline, but not professional activities. Conclusions: Analysis showed a relationship between cognitive disorders and type of physical activity. The current study will be completed by the MoCA for mild cognitive impairment. These findings compared to other ongoing studies, will contribute to the debate on the beneficial effects of physical activity on cognition.

Keywords : aging, cognitive function, physical activity, mixed models

Conference Title : ICEPH 2020 : International Conference on Epidemiology and Public Health

Conference Location : Sydney, Australia

Conference Dates : February 27-28, 2020