

Factors Associated with Cognitive Decline in the Elderly

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ABSTRACT

Objective: The purpose of this study was to determine the associated factors of cognitive impairment of the elderly.

Methods : A cross-sectional study was conducted in 2017 including subjects aged 65 and over in a retirement home in Sousse, Tunisia. Two groups were defined: The first group presenting a cognitive decline defined by the MMSE (Mini-Mental State Examination) score ≤ 20 and the second group having an MMSE score > 20 . A logistic regression analysis was used to identify factors associated with cognitive impairment.

Results: 56 patients were included in this study. The mean age was 76.2 ± 9.5 . The majority were female (69.6%). 33.9% of subjects had polyopathy (more than three pathologies) and 46.4% had polypharmacy (more than three drugs). The most common antecedents were cardiovascular in 42.9% and neuropsychiatric in 42.9%. Antihypertensive treatment was the most prescribed medication in 35.7%. The average SEGA (Short Emergency Geriatric Assessment) score screening for frailty was 9.2 ± 4.1 .

39.3% of subjects had a cognitive impairment (MMSE ≤ 20). In the univariate study, factors associated with cognitive impairment were: male sex ($p = 0.002$), polyopathy ($p = 0.03$), neuropsychiatric antecedent ($p = 0.02$), diabetes mellitus ($p = 0.05$), neuroleptic treatment ($p = 0.05$), need for assistance ($p = 0.15$), dependence (ADL score < 6) with $p = 0.13$; undernutrition (MNA score > 23.5) with $p = 0.07$; frailty (SEGA > 8) with $p = 0.03$. In the multivariate study, only frailty was significantly associated with cognitive impairment (OR = 7.04, 95% CI [1.02-48.26], $p = 0.04$).

Conclusion: The results showed that the main factor associated is frailty. Intervention studies are needed to determine the associated factors with cognitive decline in order to promote a protective lifestyle.