Mild cognitive impairment, risk of depression, quality of life and frailty in elderly users of Primary Care, Chile.

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Background: Alzheimer’s disease (AD) is preceded by Minor cognitive impairment (MCI), which is correlated with risk factors such as frailty, polypharmacy, geriatric depression (GD), loneliness, low quality of life, among others. Studies suggest that controlling risk factors and the early detection of MCI is key for AD prevention (1,2). In Chile, the use of screening tools for cognitive impairment in clinical practice is scarce. Therefore, in the effort against AD, it is important to scope geriatric populations for MCI and its risk factors on a local scale. **Objectives:** to determine the cognitive performance, risk of depression, quality of life (QOL), frailty, polypharmacy and dependence in elderly primary care users in Valdivia, Chile. **Methods:** a descriptive observational design, consisting in a questionnaire including WHOQOL-BREF for QOL, Frail test for frailty, Geriatric Depression Scale (GDS-15 or Yesavage) and Pfeffer Functional Activities Questionnaire (PFAQ) for autonomy vs dependence; and the application of the Montreal Cognitive Assessment test (MoCA) for cognitive performance by trained interviewers to adults over the age of 60 able to read, write, give consent and without visual or auditive impairment, selected in two primary care centre waiting rooms with a systematical sampling. The data obtained is analyzed via Epi-info. **Main outcomes:** “Subjective memory complaints (SMC)”; “MCI”: MoCA = 20 pts.; “MCI or other cognitive impairment”: MoCA ≤ 20 pts.(3); “Risk of GD”: GDS-15 ≥ 6 pts. (4); “Frailty”: Frail ≥ 3 pts.; “Pre-frailty”: Frail = 1-2 pts. (5); “Polypharmacy”: ≥5 drugs (6); “Dependence”: PFAQ ≥ 6 pts. (7); and “QOL” including the following health dimensions: physical, psychological, social relationships and environment (8).

Results and conclusion: In total, 209 older adults between the ages of 60 and 89 years were surveyed, with a frequency of 39,2% for SMC, 12,9% for MCI and 49,3% for “MCI or other cognitive impairment”. Demographic data, cognitive performance and polypharmacy are illustrated in the table #1. About the factors related to cognitive impairment, 21,1% were at risk of GD (Figure #1), 48,8% met criteria for pre-frailty and 19,6% for frailty (Figure #2), 34,9% for polypharmacy and 3,3% for dependence (Figure #3). The dimensions of QOL are illustrated in the figure #4. These results, including a majority of older adults scoring positive for MCI or probable mild dementia, suggest an urgent need in our local community for further screening.

Table 1: “Demographic data, subjective memory complaints, cognitive performance and polypharmacy”

Mean age, years (SD)	70,9 (7,3)		
Female gender, n (%)	144 (68,9)		
Married or living with a partner, n (%)	29 (13,9)		
Education, n (%)			
None	4 (1,9)		
Basic education	108 (51,7)		
Middle education	67 (32,1)		
University or technical education	30 (14,4)		
SMC, n (%)	82 (39,2)		
MoCA			
Normal; n (%)	106 (50,7)		
MCI; n (%)	27 (12,9)		
“Other cognitive impairment”; n (%)	103 (49,3)		
Cognitive performance by dimensions:	Mean (SD)	Min	Max
Visuospatial/executive	2,6 (1,4)	0	5
Identification	2,6 (0,7)	0	3
Attention	3,7 (1,6)	0	6
Language	1,8 (1)	0	3
Abstraction	1,1 (0,8)	0	2
Memory	1,7 (1,6)	0	5
Orientation	5,8 (0,5)	2	6
Polypharmacy, n (%)	73 (34,9)		

SD, standard deviation; SMC, subjective memory complaints; MoCA, Montreal Cognitive Assessment test; MCI, mild cognitive impairment.

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