

Urban Resilience

The Rural Environment as a Protective Factor for Functionality and Quality of Life in Patients with Cognitive Impairment.

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The social environment influences the clinical expression of cognitive decline.

Areas with low population density may provide support networks that help individuals stay independent.

Objective

Compare the daily functioning and quality of life of patients with similar cognitive levels living in a crowded city with greater difficulties in connecting to the social environment (La Plata) versus a rural town (Verónica) in Argentina.

Methods

Descriptive study of 90 patients with mild cognitive impairment (MCI) and mild to moderate dementia (with different etiologies, CDR 0.5, 1 and 2) Initial cognitive assessments were analyzed (clinical evaluation, MMSE), and the Quality of Life in Alzheimer's Disease (QoL-AD scale was administrated along with a survey about social life and personal perception. Functional results were measured using the Functional Activities Questionnaire (FAQ).

Conclusions

The findings suggest that a rural environment may act as a protective factor. Its smaller scale helps patients with mild decline keep their functional abilities longer. This highlights the importance of designing urban spaces that recreate the benefits of close communities.

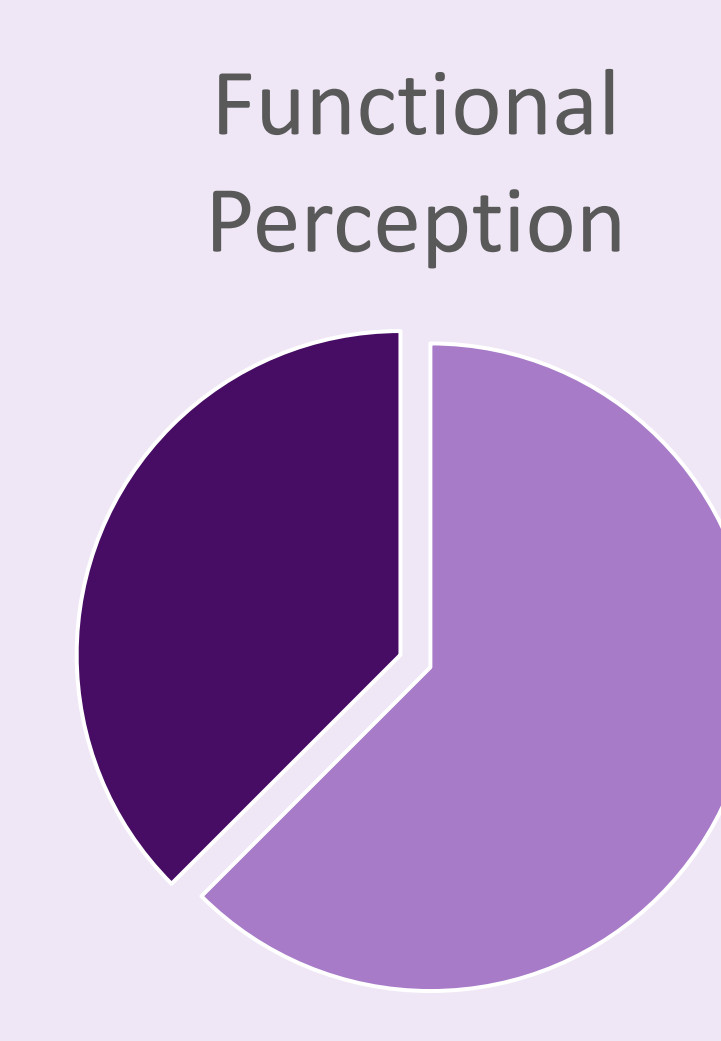
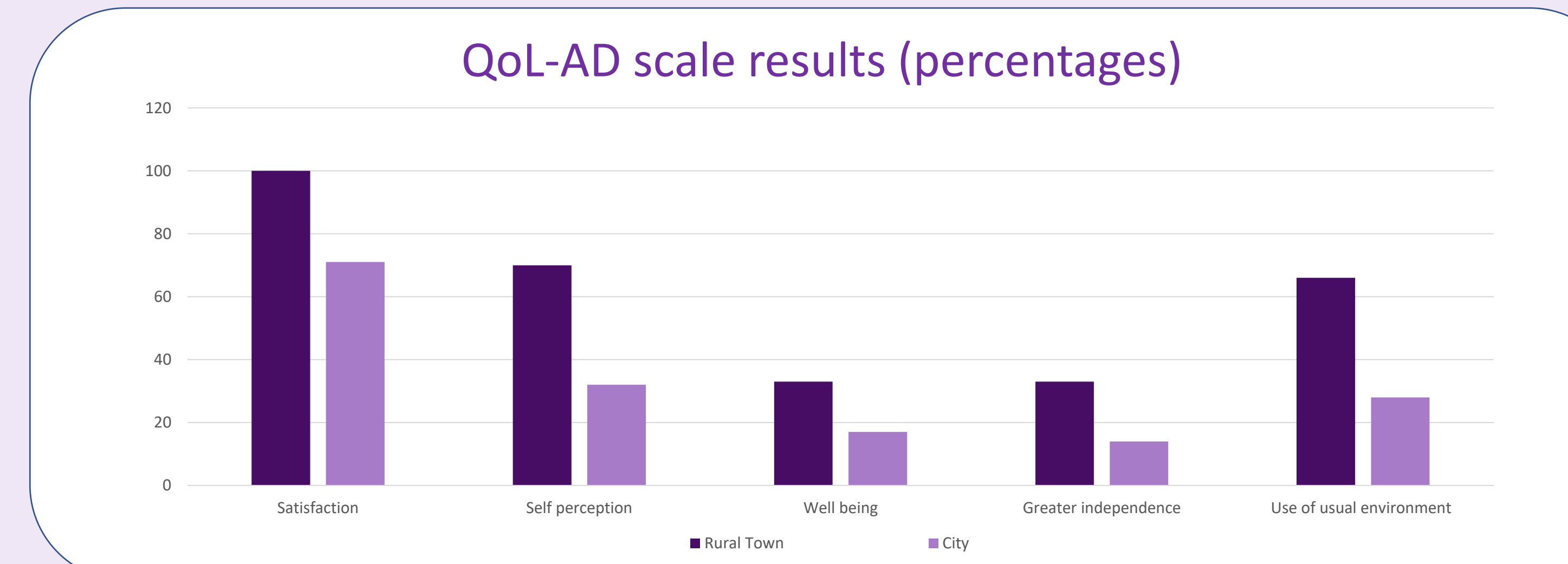
Results

A total of 90 patients participated (City: n=48; Rural Town: n=42). The mean age was 73.46, the mean MMSE score was 25.37, 56% were women. Although no significant differences were found in overall functionality between the groups, the analysis of the subgroup with mild impairment (MMSE 24-27) revealed a statistically significant difference when comparing FAQ scale results

Higher impairment was found in the City, compared to the Rural Town (Mann-Whitney U $p=0.0469$), regardless of the years of education in each group (City $M=13.9$; Rural Town $M=9$).

Concerning the QoL-AD scale, the Rural Town reported higher indicators of satisfaction with their place of residence (100% vs. 71%), better self-perception (70% vs. 32%), and general well-being (33% vs. 17%). In the survey, the population of the Rural Town showed greater independence in shopping (33% vs. 14%), walking around their usual environment (66% vs. 28%), and functional perception (50% vs. 30%).

Characteristic	Total (N=90)	City of La Plata (N=48)	Rural Town of Verónica (N=42)
Age	73.46 (3.6)	48.48 (87.5%)	42.42 (71.4%)
Sex (Female)	42 (87.5%)	48 (87.5%)	42 (68.8%)
Education (Years)	12.5 (13)	8.54 (10)	17.8 (1.1)
Duration of MCI Symptoms	73.46 (3.1)	12.36 (0.5)	13.46 (1.0)



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