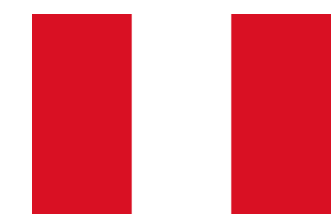


Behavioral and psychological symptoms cluster in early-onset and late-onset AD in the Peruvian population: cognitive and functional associations



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BACKGROUND

- **Behavioral and psychological symptoms of dementia (BPSDs) represent some of the most distressing symptoms** for individuals with Alzheimer's disease (AD) and their care partners and contribute to important health and psychosocial outcomes.
- Comparing early-onset AD (EOAD) and late-onset AD (LOAD) generally suggest a **greater overall BPSDs burden in EOAD**.
- **This study aims to examine the association between three predefined BPSD sub-syndromes (psychotic, emotional, and behavioral) and the cognitive and functional status of patients.**

METHODS

- **Cross-sectional data from 47 EOAD and 419 LOAD** from the IPN database were included.
- **Chi-squared and Mann-Whitney tests compared EOAD and LOAD** on the demographic and cognitive/functional aspects of BPSDs.
- The scores of the Mini-Mental State Examination (MMSE), Rowland Universal Dementia Assessment Scale (RUDAS), Pfeffer Functional Activities Questionnaire (PFAQ), and Neuropsychiatric Inventory (NPI) were **examined for Kendall's correlations**.

RESULTS

- In the EOAD group, higher cognitive performance (MMSE) is associated with fewer BPSDs, whereas lower functional ability (PFAQ) is associated with more emotional and behavioral clusters of BPSDs.
- In addition, a higher classification of CDR-GS is also associated with more emotional and behavioral clusters of BPSDs.
- Only the behavioral NPI cluster correlated moderately and negatively with the praxis ($p=0.044$, $\tau=-0.316$), visuospatial construct ($p=0.028$, $\tau=-0.341$), and the memory ($p=0.037$, $\tau=-0.318$) RUDAS domains.

Table 1: Demographic and clinical characteristics in early-onset Alzheimer's disease and late-onset Alzheimer's disease

Characteristics	Early-onset AD (N=47)	Late-onset AD (N=419)	Total sample (N=466)	Chi-squared / Mann-Whitney U (p-value)
Gender (F/M)	33/14	300/119	333/133	0.84
Years of study	12.28(5.49)	10.47(5.6)	10.66(5.61)	0.052
Age	59.47(4.5)	77.41(6.55)	75.6(8.36)	< .001***
Diagnostic delay	3.63(8.98)	5.47(12.35)	5.29(12.06)	0.025*
CDR GS	1.22(0.52)	1.42(0.69)	1.4(0.68)	0.085
GAD-7	2.96(3.33)	3.65(4.02)	3.54(3.92)	0.379
GDS	4.21(2.92)	4.51(3.66)	4.48(3.57)	0.968
NPI total score	6.15(5.14)	7(5.97)	6.916(5.89)	0.504
MMSE	18.53(6.69)	18.81(5.74)	18.77(5.87)	0.968
RUDAS	15.1(6.76)	15.74(7.09)	15.68(7.05)	0.607
PFAQ	13.04(7.48)	16.14(9.37)	15.829(9.23)	0.055

CONCLUSIONS

These results **suggest solid associations between cognitive and functional with different BPSDs clusters in EOAD and LOAD**, and that more behavioral cluster NPIs are linked to specific impairments highlighted by specific RUDAS domains in EOAD.

CONTACT INFORMATION



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EQUILIBRIA