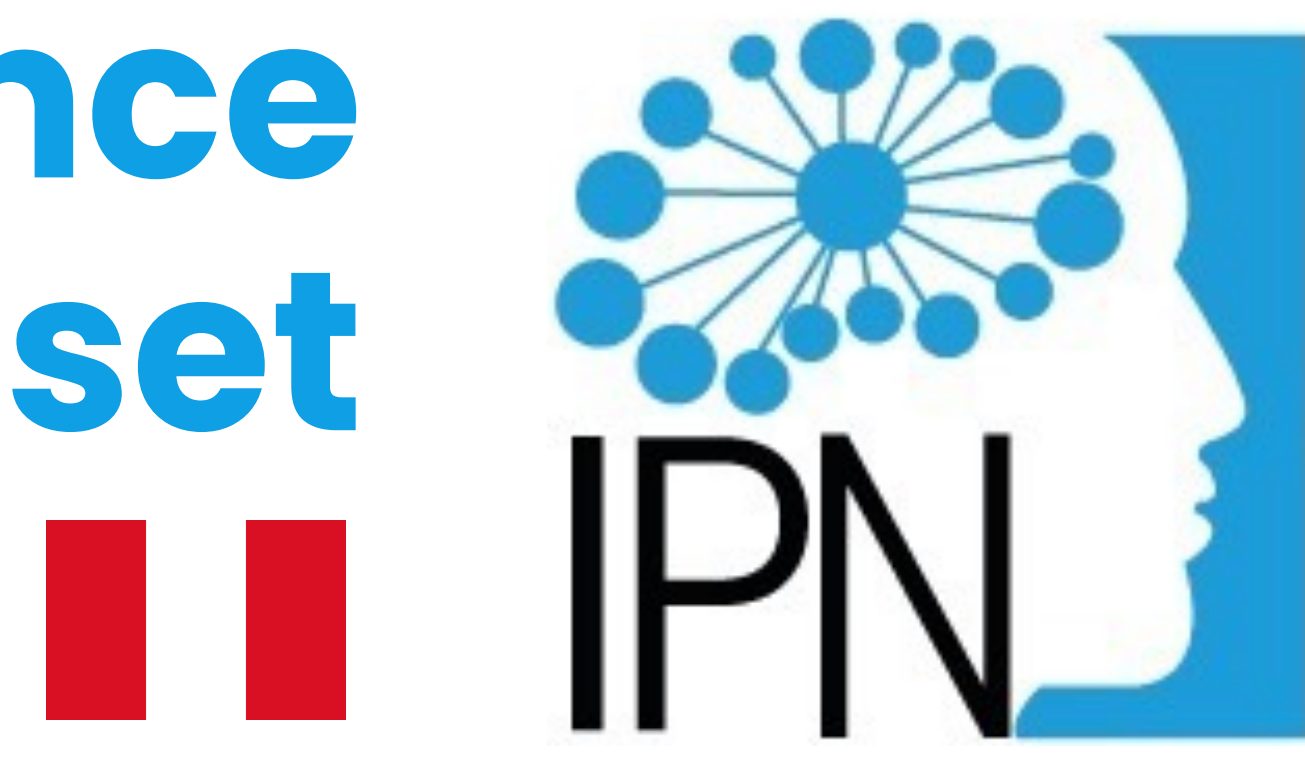


Differences in clinical and functional performance between Peruvian participants with early-onset and late-onset Alzheimer's disease



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BACKGROUND

- **Early-onset (EOAD) and late-onset Alzheimer's disease (LOAD) differ clinically**, with EOAD showing a more aggressive and heterogeneous course.
- Assessing the impact of cognitive impairment on daily functioning through Instrumental Activities of Daily Living (I-ADL), measured by the Pfeffer Functional Activities Questionnaire, is central to diagnosis.
- **This study aimed to (1) investigate cognitive differences between EOAD and LOAD and (2) investigate functional capacity differences between diagnostic groups using the PFAQ.**

METHODS

- **This study involved 462 adults, divided into two groups: EOAD (onset ≤ 64) and LOAD (onset ≥ 65), to explore brief cognitive and functional performance.** Participants were included prospectively in clinical studies of the IPN using a convenience sampling method.
- **Cognitive and functional status were assessed** using the Pfeffer Functional Activities Questionnaire (**PFAQ**), Mini-Mental State Examination (**MMSE**), Rowland Universal Dementia Assessment Scale (**RUDAS**), Montreal Cognitive Assessment (**MoCA**) and Clinical Dementia Rating (**CDR**).

RESULTS

Summary

- The results highlight **similarities in brief cognitive profiles** and dementia severity between sporadic EOAD and LOAD Peruvian cohorts.
- We found **considerable impairment in IADL problems between the EOAD and LOAD groups**. LOAD showed more problems in everyday functioning than EOAD.

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

Characteristics	Early-onset AD	Late-onset AD	P value
Gender (F/M)	33/14	297/118	0.846
Education, years	13 (9-16)	11 (6-15)	0.05
CDR 0, frequency	0 (0)	1(0.24)	0.292
CDR 0.5, frequency	3 (6.38)	18 (4.34)	
CDR 1, frequency	33 (70.21)	251 (60.48)	
CDR 2, frequency	10 (21.28)	104 (25.06)	
CDR 3, frequency	1 (2.13)	41 (9.88)	
PFAQ, total score	12 (7-18)	15 (9-23)	0.05
MMSE, total score	18.53 (6.70)	18.82 (5.75)	0.783
RUDAS, total score	16 (10-21)	17 (12-21)	0.673
MoCA, total score	10.5 (5.5-12.5)	11 (5-15)	0.659
MINT, total score	22.5 (7-29.5)	19 (9-25)	0.35

Note. CDR-GS, Clinical Dementia Rating Scale-Global Score; PFAQ, Pfeffer Functional Activity Questionnaire; MMSE, Mini-Mental State Examination; RUDAS, Rowland Universal Dementia Assessment; MoCA, Montreal Cognitive Assessment; MINT, Multilingual Naming Test.

Figure 1: Cognitive and functional performance in early-onset Alzheimer's disease and late-onset Alzheimer's disease

CONCLUSIONS

We observed differences in I-ADL challenges among diagnostic groups. **By incorporating the PFAQ, we provide new insights into the specific ways impacts everyday functioning, offering valuable information for patients, caregivers, and clinicians.** These findings can help guide more tailored care strategies and interventions, better aligning with the unique needs of patients and their families.

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