



Oral Communication

***Cognitive Complaints in People with HIV  
in Spain:  
Prevalence and Related Variables***



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## Background:

- ➡ The prevalence of cognitive complaints in people with HIV in Spain is unknown to date.
- ➡ Few studies have addressed the existence of CC in people with HIV in Spain, therefore, its relationships with demographic, clinical or psychological variables are uncertain.
- ➡ Because there is a current need to know the characteristics of the clinical pattern of people with HIV and CC, we decided to conduct this investigation.



## **Methods (I):**

- *Exploratory, observational study.*
- *Data collection from February 2011 to September 2011.*
- *4 hospitals and 10 NGOs participated.*
- *CC were recorded, and demographic, clinical and psychological variables.*
- *Descriptive and inferential tests were applied.*



## Methods (II):

### ➤ PARTICIPATING CENTERS:

<i>4 Hospitals:</i>	<i>10 NGOs</i>
<ul style="list-style-type: none"><li>- Hospital Universitari Germans Trias i Pujol (Barcelona)</li><li>- Hospital Clinico Valencia (Valencia)</li><li>- Hospital La Fe Valencia (Valencia)</li><li>- Hospital Peset Valencia (Valencia)</li></ul>	<ul style="list-style-type: none"><li>- AMUVIH (Murcia)</li><li>- ITXAROBIDE (País Vasco)</li><li>- VIVIR EN POSITIVO (Oviedo)<ul style="list-style-type: none"><li>- AVACOS (Valencia)</li></ul></li><li>- GAIS POSITIUS (Barcelona)<ul style="list-style-type: none"><li>- OMSIDA (Zaragoza)</li><li>- AMIGOS (Las Palmas)</li><li>- COGAM (Madrid)</li><li>- ENPOSITIVO.INFO</li></ul></li></ul>



## Methods (III):

➤ **VARIABLES:** Demographic, clinical and psychological.

✓ Demographic variables (by self-report):

*Gender, age, marital status, sexual orientation, education level and infection route.*

✓ Clinical variables (by self-report):

*Time since HIV diagnosis, CD4 cell count, viral load and antiretroviral treatment.*



## Methods (IV):

### ✓ Psychological variables:

**Cognitive complaints**, by self-reported question (dichotomic variable: yes/no):

*Do you feel you are experiencing regularly memory loss, slowness when planning, or paying attention?*

**Interference on daily functioning**, by self-reported question (dichotomic variable: yes/no):

*In case of cognitive changes, do you think they are interfering on your daily living or work performance?*



## Methods (V):

**Specific areas for complaints**, by self-reported check-list (7 areas):

*Concentration, reasoning, memory, learning, planning, communication, hand movements, and other areas.*

**Depression and anxiety symptoms, and general psychological health:**

- By the General Health Questionnaire (*GHQ-12, Goldberg, 1979*).
- 12 items, 4-point Likert scales, 3 dimensions.

**Quality of life**, by self-reported scales:

- Adapted from MOS-HIV Questionnaire (Wu et al, 1991).
- 4 items, 4-point Likert scales, 4 dimensions.



## Methods (VI):

➤ **DATA ANALYSES:** Descriptive and inferential tests.

✓ Descriptive tests:

*Frequencies and percentages.*

✓ Inferential tests:

*Comparisons of proportions (Chi Square) and means (t tests).*

*Discriminant analysis (stepwise method).*





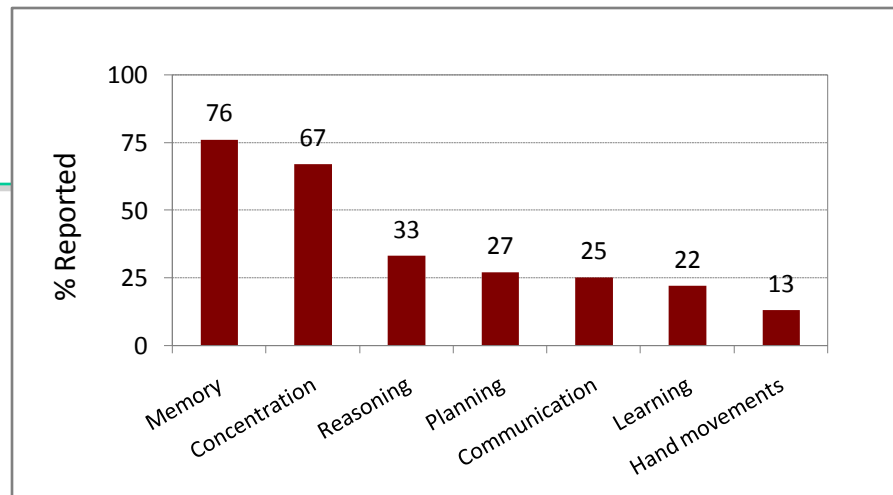
## Results (I):

- 791 individuals with HIV participated in the study.
- Mostly middle-aged (mean: 43 years old), heterosexual (58%), Caucasian (75%), men (68%), infected by a sexual intercourse (57%).
- Most of them were on antiretroviral therapy (86%), with undetectable viral load (70%), >10 years since HIV diagnosis (median: 16 years; IQR: 9, 24), and with a median CD4 cell count of 536 cells/ $\mu$ L (IQR: 354, 697).



## Results (II):

- 49% of the sample manifested CC.
- Memory and concentration were the areas most commonly reported as impaired (76% and 67%, respectively).
- 72% of subjects with CC declared association with interference on daily living or work performance.



## Results (III):

- CC were mainly associated with a longer time with HIV ( $p = .03$ ), lower CD4 cell counts ( $p < .001$ ), and undetectable viral load ( $p = .03$ ).
- Regarding the psychological variables, CC were linked to a worse general psychological health ( $p < .001$ ), and also to higher depression ( $p < .001$ ) and anxiety symptoms ( $p < .001$ ).
- Subjects reporting CC showed worse quality of life, in particular with respect to the psychological dimension of quality of life ( $p < .001$ ).



## Results (IV):

- The discriminant analysis determined that the variables that classified more optimally people with CC were the following: depression symptoms, anxiety symptoms, older age, marital status (single), and lower education level (*70.3% of correct classification*).
- According to the psychological health, in those individuals with a better psychological status, the variables more relevant were: anxiety and lower education level (*70.5% of correct classification*).
- By contrast, in people with worse psychological health, the better classifying variables were: depression and older age (*70.2% of correct classification*).



## Conclusions:

- ✓ The prevalence of CC is high in people with HIV in Spain (49%).
- ✓ CC are associated with a worse quality of life, but also to demographic and clinical variables, particularly depression and anxiety symptoms.
- ✓ Characteristics that optimally define people with CC in Spain are related to psychological health, and also to education level and age.



## ***Caveats:***



*Study variables were assessed by self-report.*



*Restricted information on CC due to the dichotomic character of the variable (yes/no).*



*Neurocognitive performance was not evaluated in this study.*



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## Participating Centers:

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