



Oral Communication

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



MEDICINA CLÍNICA

www.elsevier.es/medicinaclinica



Muñoz-Moreno, JA^{1,2}, Fuster, MJ^{3,4}, Fumaz, CR^{1,2}, Ferrer, MJ^{1,2}, Molero F⁴, Jaen A⁵, Clotet, B^{1,2,6} and Dalmau, D^{3,5}

¹ Lluita contra la SIDA Foundation – Germans Trias i Pujol University Hospital (Badalona); ² Autònoma de Barcelona University (Bellaterra); ³ Sociedad Española Interdisciplinaria de SIDA (Madrid); ⁴ Universidad Nacional a Distancia - UNED (Madrid); ⁵ Mútua de Terrassa Hospital (Terrassa); ⁶ Institut per a la Recerca de la SIDA - IrsiCaixa (Badalona)



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



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).

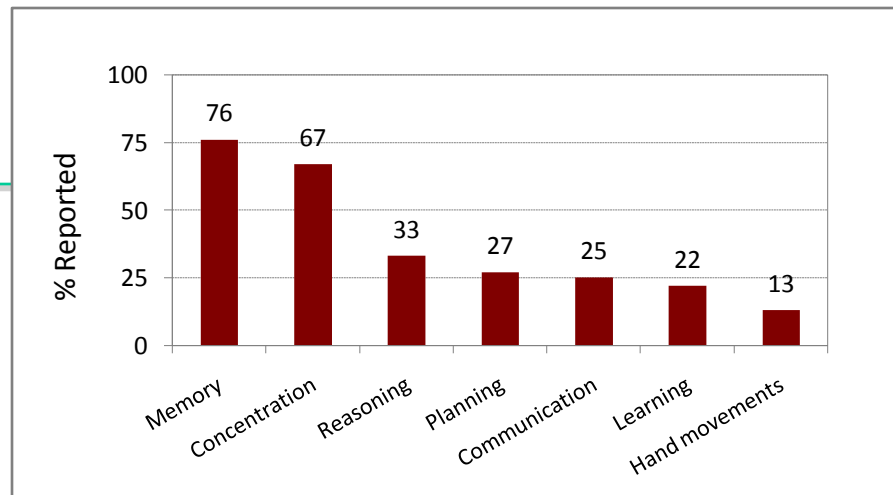


Results (I):

- 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/ μ 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.



Acknowledgements:

Coordinator Centers:

- ✧ **SESIDA** (Sociedad Española Interdisciplinar de SIDA).
Madrid, Spain.
- ✧ **Fundació Lluita contra la SIDA** - Hospital Universitari Germans Trias i Pujol. *Badalona, Barcelona, Spain.*

Participating Centers:

- Hospital Universitari Germans Trias i Pujol (Barcelona)
- Hospital Clinico Valencia (Valencia)
- Hospital La Fe Valencia (Valencia)
- Hospital Peset Valencia (Valencia)
- AMUVIH (Murcia)
- ITXAROBIDE (País Vasco)
- VIVIR EN POSITIVO (Oviedo)
- AVACOS (Valencia)
- GAIS POSITIUS (Barcelona)
- OMSIDA (Zaragoza)
- AMIGOS (Las Palmas)
- COGAM (Madrid)
- ENPOSITIVO.INFO

