

NEUROTICISM AND ITS INFLUENCE ON ANTIRETROVIRAL THERAPY

10th Symposium on Neuropsychiatry and HIV

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Faculty Disclosure

<input type="checkbox"/>	No, nothing to disclose
<input checked="" type="checkbox"/>	Yes, please specify:

<i>Company Name</i>	<i>Honoraria/ Expenses</i>	<i>Consulting/ Advisory Board</i>	<i>Funded Research</i>	<i>Royalties/ Patent</i>	<i>Stock Options</i>	<i>Ownership/ Equity Position</i>	<i>Employee</i>	<i>Other (please specify)</i>
Lundbeck	X							
Esteve	X							
Janssen	X							
Otsuka	X							

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NEUROTICISM - HIV

- ✓ **Five Factor Model of Personality:** Neuroticism, Extraversion, Agreeableness, Openness to experience, Conscientiousness
- ✓ **High scores in Neuroticism** → tendency to experience **unpleasant emotions** (anger, anxiety, depression, etc.).
Emotionally unstable and **poor impulse control**.
- ✓ **NEO PI** questionnaire assesses the big five personality traits.
- ✓ **Investigations Neuroticism - HIV:**
 - ↑ Neuroticism and ↓ Conscientiousness → higher HIV risk (Costa, McCrae et al., 2000)
 - ↑ Neuroticism in HIV patients → lower quality of life (Burgess et al., 2000)
 - ↑ Neuroticism and ↓ Conscientiousness and ↓ Extraversion → more prevalent in HIV+ (Srivastava et al., 2016)

ADHERENCE

¿Neuroticism?

Substance use

Psychiatric disorders

Sociodemographic factors
(financial constraints, social support, etc.)

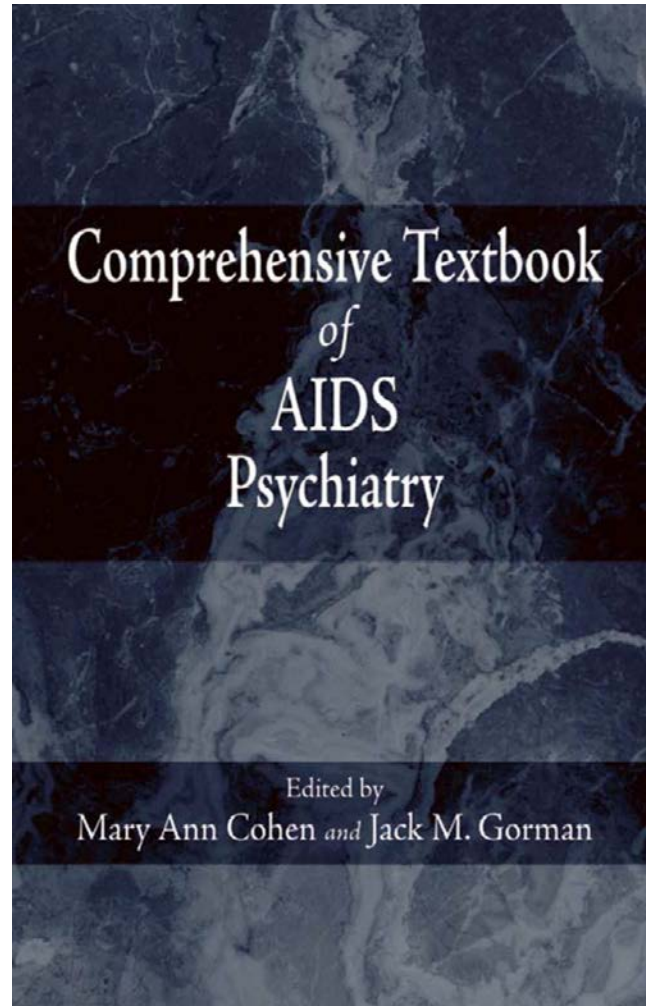
HCV
coinfection

ARV: side effects, daily dosing frequency, etc.

Trust HIV care provider

ANTIRETROVIRAL THERAPY

NEUROTICISM - HIV



“The same personality characteristic that increases risk of HIV also reduces ability to adhere to ARV therapy”

.....but there are few investigations about it.

Hutton, HE; Treisman G. The Role of Personality in HIV Risk Behaviors: Implications for Treatment. In: Cohen, Mary Ann; Gorman JM, editor. Comprehensive Textbook of AIDS Psychiatry. New York: Oxford University Press; 2008. p. 141–9.

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METHOD



Programa de Doctorado en Medicina (RD 1393 / 2007)

PERSONALIDAD Y ADHERENCIA AL TRATAMIENTO
ANTIRRETROVIRAL EN PACIENTES VIH +

Tesis doctoral presentada por
DANIEL HERNÁNDEZ HUERTA

Directores:
Dra. Enriqueta Ochoa Mangado
Dr. Agustín Madoz Gurpide

Alcalá de Henares, 2017

- ✓ **Design:** cross-sectional case-control study
- ✓ **n = 125 patients HIV +**
 - Controls: 79 (> 95% adherence)
 - Cases: 46 (\leq 90% adherence)

MEASURES

Ad hoc questionnaire

- Sociodemographic factors, clinical parameters of HIV, substance use and psychiatric history

MINI International Neuropsychiatry Interview

- Structured diagnostic interview for DSM-IV and ICD-10 psychiatric disorders

Cognitive Performance

- Trail Making Test A y B
- Decoding Digit Symbol
- Letter-Number Sequencing Test
- D2 Test
- Zoo Map Test
- Wisconsin Sorting Card Test

NEO PI-R

- Personality questionnaire designed to measure Five Factor Model of Personality

NEO PI-R COMPLETED



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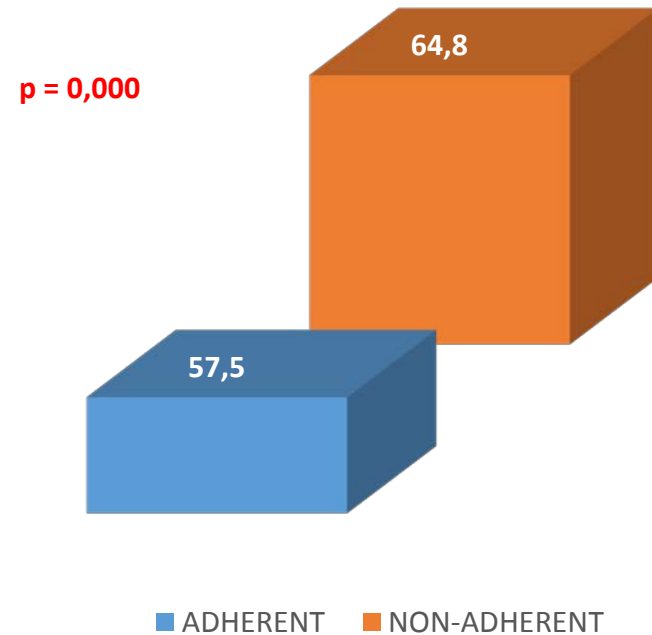
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COMPARATIVE ANALYSIS

NEUROTICISM



Non-adherent patients had significantly higher scores in Neuroticism

LOGISTIC REGRESSION MODEL

	B	Error estándar	Wald	gl	Sig.	Exp(B)	95% C.I. para EXP(B)	
							Inf.	Sup.
Gender	-1,791	0,965	3,448	1	0,063	0,167	0,025	1,105
Major depressive disorder	3,956	1,226	10,413	1	0,001	52,244	4,726	577,489
Neuroticism	0,173	0,078	4,946	1	0,026	1,189	1,021	1,385
Civil status	-2,401	1,210	3,935	1	0,047	0,091	0,008	0,972
HCV	2,578	0,931	7,664	1	0,006	13,172	2,123	81,721
Treatment supervisión	2,104	1,069	3,873	1	0,049	8,201	1,008	66,683
D2 test	-0,007	0,004	2,893	1	0,089	0,993	0,985	1,001
Zoo Map test	-0,714	0,267	7,136	1	0,008	0,490	0,290	0,827

Each point in Neuroticism factor increases 1.2 times the risk of non-adherence to ARV therapy

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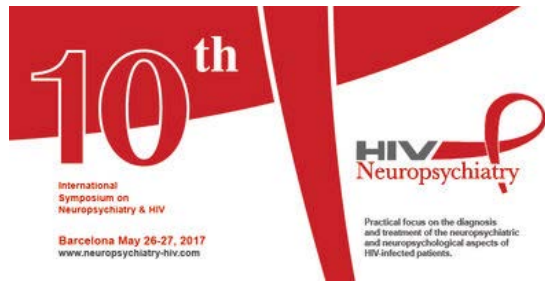
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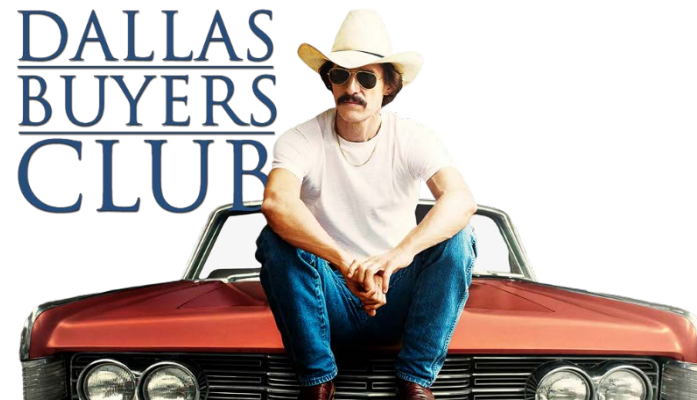
4. CONCLUSIONS

CONCLUSIONS

- ✓ Previous studies have related higher scores in Neuroticism with higher risk of HIV infection or lower quality of life in HIV patients.
- ✓ Some personality traits could reduce the ability to adhere to ARV therapy.
- ✓ In our study, higher scores in Neuroticism personality trait influence adherence to ARV therapy.
- ✓ NEO PI-R questionnaire could be useful in order to identify those HIV patients who are in greater risk of non-adherence to ARV therapy.



Thank you for your attention



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