# ASSESSMENT OF DAILY FUNCTIONING IN YOUNG ADULTS INFECTED WITH HIV SINCE CHILDHOOD

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#### BACKGROUND

More than 25 years of chronic HIV infection

• Challenges in:

everyday life education job family life love life, etc.

 ○ 2007 – 2009, cohort was about 18 y old – they had reported ability of doing daily activities but had chosen to let others do them

? How does the young cohort function in everyday life?

? How do they perceive themselves in performing different activities ?

#### MEASURING TOOLS

## Self-report Questionnairs:

- Activities of daily living (ADL) reports the level of performing basic tasks of everyday life like housekeeping, ability to handle finances, shopping, cooking, laundry, ability to use telephones, bathing, dressing, etc.
- Patient's Assessment of Own Functioning Inventory (PAOFI) a subjective neurocognitive complaint questionnaire where patients rated their problems with memory, language and communication, sensory-motor skills, and higher level cognitive and intellectual functions
- Academic Skills Questionary reports how often patients are reading, writing and using addition/subtraction daily

#### The UCSD Performance-based Skills Assessment

(UPSA) - a role-play test designed to evaluate a person's functional capacity in three selected areas of basic living skills: Finance (Counting Money and Paying Bills) and Communication

Neurocognitive battery – cognitive tests assessing 7 domains with a composite global deficit score (GDS)

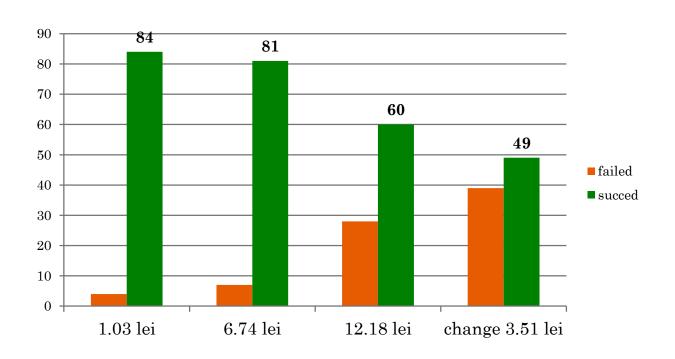
#### STUDY GROUP

Number 87 HIV+ patients

- oMean age 24
- Education

Grades	No	%
8	24	28
9 – 12	34	39
> 12	29	33

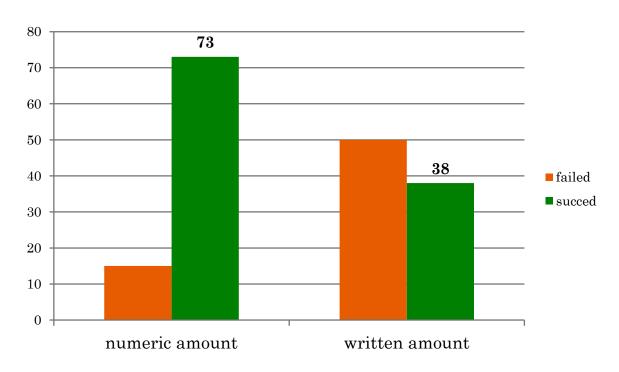
#### **UPSA:** FINANCE: 1. COUNTING MONEY



#### Comments:

- Giving change implies a math operation.
- There were 2 strategies to give change.

#### **UPSA: FINANCE: 2. PAYING BILLS**

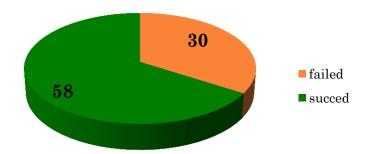


### Comments:

- difficulties in writing correctly

#### **UPSA: FINANCE: 2. PAYING BILLS**

# copying account number

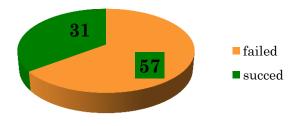


#### Comments:

an attention deficit in copying the account number

#### **UPSA: 3. COMMUNICATION**

saying "Petrica Ionescu, Busteni"



Pronunciation

or

Attention

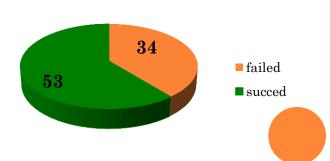
or

Memory

? DEFICIT?

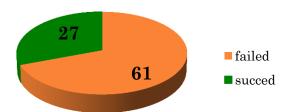
phone number

Comments: !!! Memory !!!!



#### **UPSA: 3. COMMUNICATION**

rescheduling an appointment



The most difficult item was to reschedule an appointment.

- Not an usual habit
- More actions in one task
- Strategies of coping

#### **UPSA**

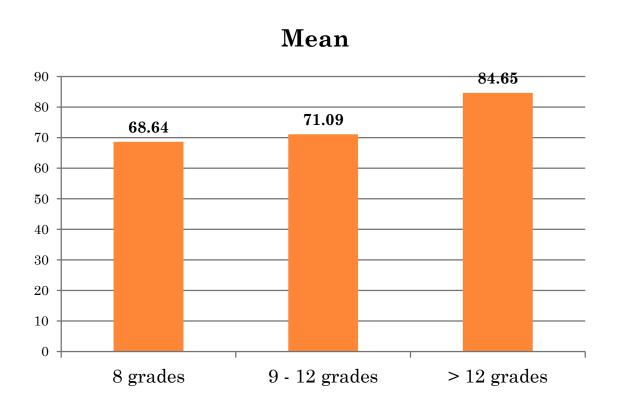


- ! 2 pts wrote wrong their own name!
- ! 4 pts dial wrong a number from paper!

#### Pts know better:

- - what to do in an emergency situation ("Call 112")
- what to do for a medical appointment (documents, and preparation)

#### **EDUCATION AND LEVEL OF FUNCTIONING (UPSA)**



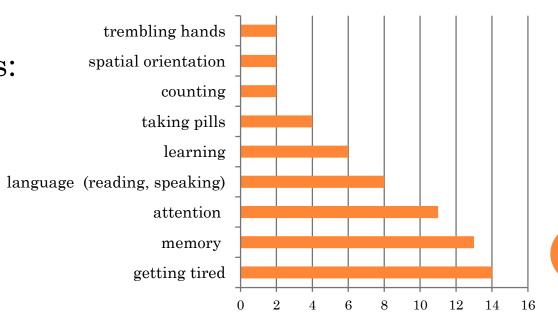
 $F=11.42, p<0.01, \eta 2=0.21$ 

21% of the variation of functioning measured by UPSA might be due to education (higher education = better levels)

# ACTIVITIES OF DAILY LIVING (ADL)

- Pts reported a **decline** of functioning in "initiating social activities" (T=-2.74, p<0.01)
- And an **improvement** in:
  - "cooking" (T = 2.93, p< 0.01)
  - "laundry" (T = 2.26, p < 0.05)

• Pts complaints:



#### **CORRELATIONS**

#### UPSA – GDS (Global T)

r=0.49, sig.=0.000,  $r^2$ =0.24 (large effect, Cohen 1988)

Finance Scale is a better predictor for GDS than Comm. Scale

 $r_{FS}$ =0.45, sig.=0.000,  $r^2$ =0.20 (large effect)  $r_{CS}$ =0.38, sig.=0.000,  $r^2$ =0.14 (medium-large effect)

#### Academic Skills Questionnaire – GDS

(r<sub>Addition/Subtraction-UPSA</sub>=0.23, sig.=0.038, m=2.93, sd=0.81)

Using math operations daily increased the chance for a better intellectual functioning

#### **CORRELATIONS**

#### UPSA - PAOFI

- There was no association between PAOFI scores and person's functional capacity as assessed by UPSA.
- This observation was previously reported: PAOFI results were not associated with cognitive decline (<u>Richardson-Vejlgaard R</u><sup>1</sup>, <u>Dawes S</u>, <u>Heaton RK</u>, <u>Bell MD</u>, <u>2009</u>)
- Pts reported a good functioning on PAOFI domains.

#### • UPSA – ADL

- There is no association between ADL scores and person's functional capacity.
- Even if a few pts complained about managing their money, much more had difficulties in counting it.

#### **CONCLUSIONS**

## Research

- UPSA is an efficient and quick instrument for evaluating deficits in daily functioning
- UPSA may be a good predictor for neurocognitive impairment
- PAOFI partially reveals the real functioning in patients
- Using UPSA on a larger sample in order to improve its psychometric qualities and be used on a larger scale

## **Psychological**

- "Survival" personality in Pts in order to compensate any deficit in activity for a better integration in the society (coping strategy)
- Pts can not be aware of their real deficit
- Encouraging Pts to engage in intellectual activities (reading, learning smth new, etc.)
- Encouraging Pts to be aware of their functioning

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