Health outcomes in adolescents and young adults living with HIV before and after transition to adult care in Barcelona

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Introduction and Objectives

In most cases adolescents living with HIV require a **transfer** to adult care which could entail **negative health outcomes** for adolescents and youth. However, **data** on this field are **scarce**. The **main objectives** of this study are:

To **describe** the demographic and HIV related data of patients who transferred from pediatric to adult care in Barcelona and **compare** the quantitative health outcomes before and after the referral process.

Materials and Methods

An **observational, prospective study with retrospective data collection** was conducted with **53 adolescents** living with HIV who had transitioned from **Hospital Sant Joan de Déu (HSJD) to Hospital Clínic (HCB)** in Barcelona between 2006 and 2017. **Data** were collected from clinical records **before transition, right after it and at the last control visit**. Risk factors for having a detectable viral load were evaluated using a **regression model**.

DEMOGRAPHIC DATA

- Baseline data
- Educational Level
- Socioeconomic Level → FAS II
- Neurocognitive Functioning

CLINICAL DATA

- HIV/AIDS
- Treatment
- **CD4**
- **Viral Load**

PAEDS → ADULTS → LAST

Results

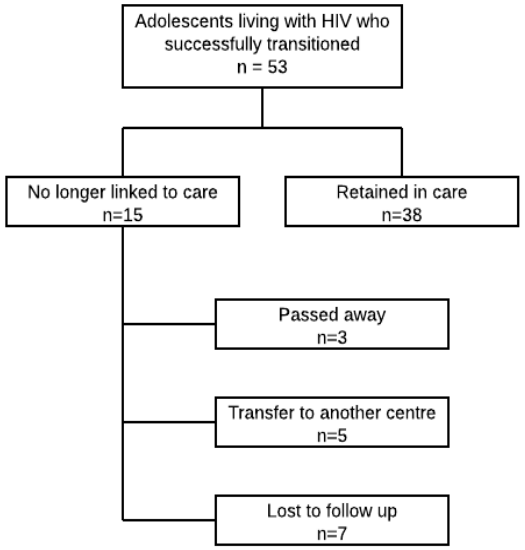

Figure 1: *Linkage to care of the cohort*

During Paediatric Care		During adult Care	
CD4 count (cells/µl) at transition (n=53)	n (%)	CD4 count (cells/µl) at last visit (N=50)	n (%)
<200	3 (5.7)	<200	5 (10)
200-499	12 (22.6)	200-499	11 (22)
≥ 500	38 (71.1)	≥ 500	34 (68)
Virological status at transition (n=49)	n(%)	Virological status at last visit (n=49)	n(%)
Undetectable	28 (57.1)	Undetectable	34 (69.4)
Detectable	21 (42.9)	Detectable	15 30.6)

Table 1: *CD4 count and viral load data of the cohort*

As showed in *Figure 1*, **53 patients** successfully transitioned from HSJD to HCB during the time of the study, but by July 2017, 15 (**28.3%**) of them were no longer linked to care, most of them (**46.7%**) due to unknown reasons. Additionally to the clinical data presented in *Table 1*, it was found that most of the patients (**75%**) with undetectable viral load during paediatric care were found to remain undetectable during adult care (*Figure 2*).

	Youths living with HIV (n=53)
	Adjusted OR* (95% CI)
Low educational level	27.39 (1.5-487.48)[a]
Absence of virologic failure	0.12 (0.001-0.170)[a]
FAS	19.31 (0.472-790.68)[b]
Low	
Middle	3.06 (0.093-100.19)[b]

OR, Odds Ratio; CI, Confidence Interval; FAS, Family Affluence Scale
* Multivariable model adjusted by sex and variables included in the table.
a. p<0.05
b. p>0.05

As seen in Table 2, **low educational level** was found to carry a **27-fold** increase in the risk of having a **detectable viral load** compared to high educational level. The **absence of virological failure** during adulthood reduced the risk of being detectable by 88%.

Table 2*: Determining factors for a detectable viral load (last visit)*

Conclusions

While not showing a clear impact of the transition process on the health outcomes of this cohort, these findings **align** to those presented in **similar studies**. Patients with low educational level and/or virologic failure during adulthood should be **followed up more closely**.

As **future work lines**, this research could be expanded with a **perception-based qualitative analysis** of the transition process, which could be of use to support the creation of new guidelines.