

Maintaining engagement in care and HIV viral suppression in patients with mental health and substance abuse co-morbidities: outcome of an audit

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Introduction

- Lifelong engagement with care and sustained HIV viral load suppression are key to the personal and population benefits of antiretroviral therapy (ART)¹
- Poor retention in care increases the likelihood of higher HIV viral loads and decreased CD4 cell count predicting poorer survival with HIV infection²
- HIV engagement and management can be complicated by poor mental health (MH), alcohol and other drug (AOD) abuse
- Using a case management model and an enhanced care program (ECP)^{3,4,5} St. Vincent's Hospital HIV, Immunology & Infectious Diseases Unit seeks to promote engagement in care and adherence to ART for our most vulnerable patients
- This program has never been formally evaluated.
- Participants attend without appointment Monday – Friday, daily, weekly, fortnightly, monthly or PRN for assessment, support and ART via directly observed therapy or via loaded dosette boxes

Aim

- To formally describe and objectively audit our nurse led ECP

Method

- We identified the variables of interest
 1. Patient characteristics
 2. Receipt of ART (engagement and medication adherence)
 3. Outcome (HIV viral suppression)
- We conducted a comprehensive retrospective review of medical records and electronic databases of 26 patients enrolled in the ECP between 1st July 2014 – 31st June 2015
- One investigator extracted relevant data and entered it onto a specifically designed Excel database
- A second investigator cross checked the source data and data entry for accuracy
- Data was analysed using simple descriptive statistics

Results

Table 1. Patient Characteristics (n=26)

	Gender (n/%)	Age (mean/SD)	Years living with HIV (mean/SD)	Years on the ECP (mean/SD)	Level of support (n/%)
Male	23 (88%)	45 (9) years	14 (7) years	5 (4) years	Daily 6 (23%)
Female	2 (8%)				Weekly 11 (42%)
TG	1 (4%)				Fortnightly 4 (15%)
					Monthly 5 (19%)

Table 2. Co-morbidities (n=26)

Co-morbidities (mean/SD)	Mental health diagnosis [^] (n/%)	AOD abuse (n/%)	Hepatitis C ^{^^} (n/%)
3 (2)	15 (60%)	Total 19 (73%)	10 (40%)
		CMA 15 (60%)	
		IDU 16 (61%)	

[^]Major depression, bipolar disorder or schizophrenia

^{^^} PCR positive

Table 3. Results (n=26)

Engaged in care (n/%)	On ART (n/%)	Undetectable viral load at last review (n/%)	Sustained undetectable viral load [^] (n/%)	CD4 T cell count (10 ⁶ /L) at last review (n/%)
26 (100%)	26 (100%)	19 (73%)	12 (46%)	< 100 1 (4%)
				101-250 6 (23%)
				251-350 3 (11%)
				>350 16 (61%)

[^] 12 months

Conclusions

- A program of enhanced nursing care for HIV positive men and women with significant MH and AOD co-morbidities facilitates engagement in care but not universal or sustained viral suppression
- Further research is required into the disconnect between perfect engagement and sustained HIV viral suppression in this population

Disclosure of interest statement

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