



Characteristics and outcomes of HIV-infected patients admitted for inpatient care to a rural district hospital in Nsanje, Malawi

PF Giorgetti, A Shigayeva, B Kapumba, RO Gutierrez, E Goemaere, R Burton, AC Ndembera, A Chijuwa

Outline

- **Background**
- **Objective**
- **Methods**
- **Results**
- **Conclusion**



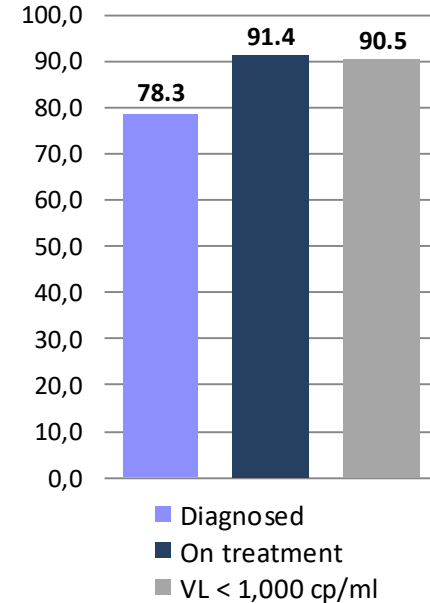
Radiology dept., Nsanje District Hospital, Malawi

© Luca Sola

Background



- 14 facilities (1 MoH district hospital and 2 CHAM hospitals)
- 20,464 alive on ART (Q1 report, 2018)
- Nsanje HIV prevalence adults ≥ 15 years 12.1% (MSF HIPS) vs national at 10.6%, (MPHIA, 2016)
- MSF in Nsanje since 2011: mentorship for staff at PHC level and supporting the district hospital



Nsanje Population-Based HIV Impact Study, 2016, MSF-Epicentre

Objective & Methods

To describe characteristics and outcomes of HIV-infected patients admitted at Nsanje District Hospital (NDH), Malawi

Methods

- population: 734 adults ≥ 15 years old admitted to NDH from 1st May 2016 to 31st December 2017
- data collection: retrospective review of hospital medical records and ART history data collected at PHC level
- analysis: categorical variables compared using Chi-square test, factors associated with mortality assessed using multivariate logistic regression
- advanced HIV defined as $CD4 < 200$ cells/mm³ or new WHO stage 3/4 condition

Results: patients' characteristics

	ART naive	ART experienced		
		< 6 months	> 6 months	History unknown ^a
Total (%)	118 (16)	186 (25)	310 (42)	120 (17)

^a Self-reported being on ART, no data validation at PHC level

- 50% (367/734) were male
- median age was 37 years old
- among those on ART > 6 months at admission, the median time on treatment was 46 months
- 14% (71/496) were known to have interrupted treatment
- median CD4 count was 151 cells/mm³ and 57% (189/331) had CD4<200 cells/mm³
- VL data: long (till 7 months) TAT in the study period

Results: reason for admission

734 HIV-related admissions

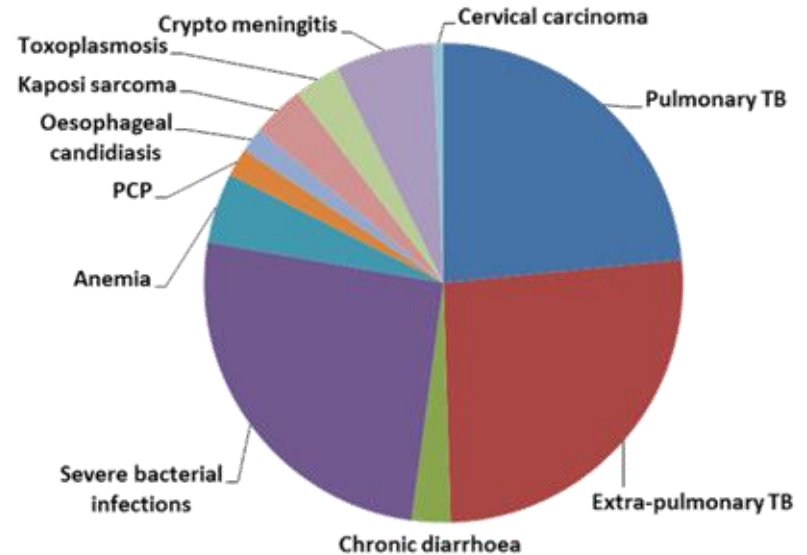
- average length of stay was 7 days
- 10% (75/734) were re-admitted at least once

Prevalence of advanced HIV disease

58% (68/118) in ART naive

73% (451/616) amongst ART experienced

519 (71%) admissions for advanced HIV disease



Results: mortality

**In-hospital mortality was 29% (216/734)
31% (68/216) died \leq 48 hours of admission**

Factors associated with in-hospital mortality were:

- **advanced HIV disease** (aOR=1.85)
- **male** (aOR=1.44)
- **aged \geq 45** (aOR=1.69)

Post-discharge follow-up

Follow-up at PHC level at 1, 2 and 3 months after discharge

(phone calls and check of outcome at PHC level)

	Q3 2017	Q4 2017	Q1 2018
Patients with confirmed outcome @ 12 weeks after discharge	59% (59/100)	60% (54/90)	46% (20/44)
Confirmed alive @ 12 weeks after discharge	64% (38/59)	69% (37/54)	90% (18/20)

16% died after discharge but 40% had no confirmed outcome

Conclusion

Majority of patients admitted are ART experienced (usually > 6 months) and fulfill the criteria for advanced HIV disease

In-hospital HIV-related mortality remains high (despite progress in 90-90-90 targets)

Way forward

- **hospital level:** rapid assessment unit for HIV patients, likely to reduce mortality
- **PHC level:**
 - **intensified identification of patients with advanced HIV** (decentralization of screening package) with **focus on TB** (most frequent coinfection) **and crypto meningitis**
 - **increased switch to second line ART regimes**

MoH staff in NDH

M&E staff from MSF

NDH staff from MSF

SAMU

ZIKOMO KWAMBIRI

