BACKGROUND

- In April 2011, in partnership with the KwaZulu-Natal Department of Health, Médecins Sans Frontières started an HIV program, called “Bending the Curves”.
- During the last decade, KwaZulu-Natal successfully scaled up antiretroviral treatment (ART), and the number of patients on ART increased 30-folds.
- Despite this progress, advanced HIV disease remains a persistent public health challenge.

AIMS

- To analyze the trends in the numbers and characteristics of adult patients who were identified with advanced HIV disease at 9 MSF-supported clinics in the period between 2008 and 2018.
- To characterize patients with CD4 count <200 cells/μL according to gender, prior viral load (VL), ART experience, and continuity in care.
- To assess time to CD4 recovery to >350 cells/μL among patients identified with CD4 count <200 cells/μL.

METHODS

- Cross-sectional analysis of annual CD4 counts distribution among ART patients, aged ≥15 years old, receiving treatment at 9 MSF-supported clinics.
- ART experienced patients were categorized whether prior a CD4 test they were continuously in care or had a treatment interruption for ≥90 days.
- High VL was defined as VL ≥1000 copies/ml. For ART experienced patients with CD4-200 cells/μL, prior VL test was defined as a most recent test taken a maximum 15 months preceding date of CD4<200 cells/μL.
- Competing risk analysis was performed to estimate cumulative incidence of CD4 recovery to >350 cells/μL, and outcomes post identification of CD4<200 cells/μL.
- Routine ART program data (TierNet) was used for analysis.

RESULTS

- Between 2008 and 2018, number of ≥15 years old patients active on ART increased 30-folds from 469 to 14676 (Figure 1).
- Proportion of patients with CD4<200 cells/μL decreased from 42.3% to 6.8%.
- Median CD4 count among active patients increased from 234 cells/μL (IQR; 145 – 356) to 559 cells/μL (IQR; 189 – 741).

- The number of unique patients per year with CD4 <200 cells/μL peaked at 2013 (n=974) then varied from 726-894 without any significant trend (Figure 2A).
- Among patients with CD4 was <200 cells/μL, proportion of ART experienced patients increased from 28.8% to 56.6% (Figure 2B).

- Males were more likely to present with CD4<200 cells/μL during the study period (Figure 3), adjusted OR=2.2 [95%CI; 2.0 – 2.3] (adjusted for year of study).
- Among ART experienced patients with CD4<200 cells/μL, proportion of patients with prior high VL ≥1000 copies/ml was above 30%, in most years studied.
- In 2018 (Figure 4), 56.6% (411/726) patients with CD4 ≤200 cells/μL were ART experienced.
- 33.1% (136/411) ART experienced had at least one prior VL ≥1000 copies/ml.

CONCLUSIONS

- Advanced HIV disease is increasingly represented by patients who are ART-experienced with a history of care disengagement or likely virological failure.
- Implementation of male-friendly services, combined with intensified adherence support, is necessary to respond effectively.