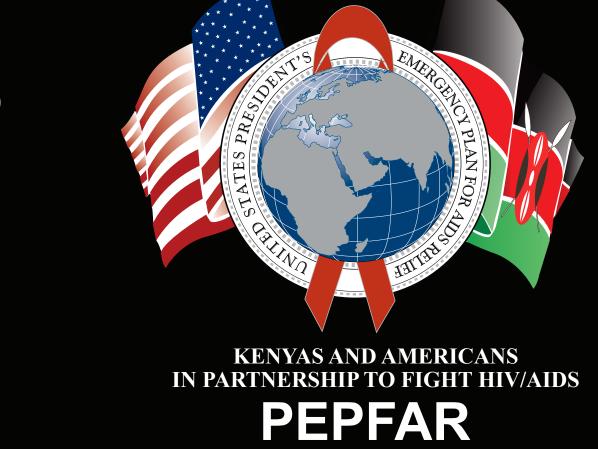


CHARACTERISTICS OF PEDIATRIC PATIENTS ENROLLED IN HIV CLINICS OVER TIME IN KISUMU, KENYA



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Background

- New HIV infections among children in Kenya declined from 44,000 in 2000 to 12,940 in 2013
- AIDS-related deaths claimed 10,390 children in 2013 and 103,000 children remained in need of ART in 2015
- Despite progress made, more
 efforts are needed to meet the
 UNAIDS 90:90:90 goal for children



Study Objective

This study aimed to describe the characteristics, trends and outcomes of HIV exposed infants tested and the children enrolled in HIV care and treatment from 2007 – 2013.

Methods

- Retrospective data review
- Cohort of children ≤14 years of age enrolled in HIV care and treatment
- Two high volume facilities supported by Family AIDS Care and Education Services (FACES), in Kisumu, Kenya
- Assessed the following trends
 - Age at enrollment
 - Time to ART initiation
 - 12-month outcomes
 - Aggregated early infant infections

Analysis

- Proportions for categorical variables
- Median (inter-quartile range (IQR)) for continuous variables
- Wilcoxon rank-sum, chi-square and log-rank tests to test for trends over time

Results

• The results were as follows:

Table 1: Demographics Vegrat Enrolment

		Year at Enrolment						
Variable	2007	2008	2009	2010	2011	2012	2013	Test of Trend ¹
Number of Peads at Enrolment (n)	295	214	260	228	185	104	92	
Infants testing HIV positive		5/44(11.4%)	39/214(18.2%)	32/388(8.2%)	36/341(10.6%)	3/367(0.8%)	8/354(2.3%)	p<0.001
Median Age (in yrs; IQR)	4.4 (IQR 2.0,8.0)	3.5(IQR 1.0,6.5)	3.7 (IQR 1.1,7.2)	3.0(IQR 0.9,8.4)	4.2(IQR 1.6,8.1)	5.3(IQR 1.6,9.5)	3.5(IQR 1.2,6.9)	p=0.79
Age at Enrolment ≤2 yrs >2-10 yrs >10 yrs	70(23.7%) 188(63.7%) 37(12.5%)	73(34.1%) 127(59.4%) 14(6.5%)	89(34.2%) 140(53.9%) 31(11.9%)	86(37.7%) 108(47.4%) 34(14.9%)	53(28.8%) 105(56.8%) 27(14.6%)	28(26.9%) 55(52.9%) 21(20.2%)	33(35.9%) 48(52.2%) 11(12.0%)	
		-	abla 2	ADTI				

Table 2: ART Trends

	Year at Enrolment							
Variable	2007	2008	2009	2010	2011	2012	2013	Test of Trend ¹
Total Eligible for ART (n) ²	263(89.2%)	196 (91.6%)	230(88.5%)	202(88.6%)	153 (82.7%)	83 (79.8%)	83 (90.2%)	
Total Initiated After Enrolment	203 (77.2%)	164 (83.7%)	198(86.1%)	169 (83.7%)	120 (78.4%)	71 (85.5%)	73 (88.0%)	
Median Time to ³ Initiation (Days; IQR) ⁴ 23(4,67)	n=159 33(0,135)	n=128 34(7,85)	n=173 24(5,70)	n=149 30(7,75)	n=112 16(2,39)	n=70 11(4,31)	n=71 12(3,33)	p<0.001
Initiation Age ≤ 2yrs >2-10yrs >10yrs	38(17.3%) 153(69.6%) 29(13.2%)	55(32.7%) 103(61.3%) 10(6.0%)	74(34.9%) 108(50.9%) 30(14.2%)	73(41.0%) 75(42.1%) 30(16.9%)	42(31.6%) 73(54.9%) 18(13.5%)	24(29.6%) 40(49.4%) 17(21.0%)	31(40.8%) 38(50.0%) 7(9.2%)	

Table 3: Outcomes

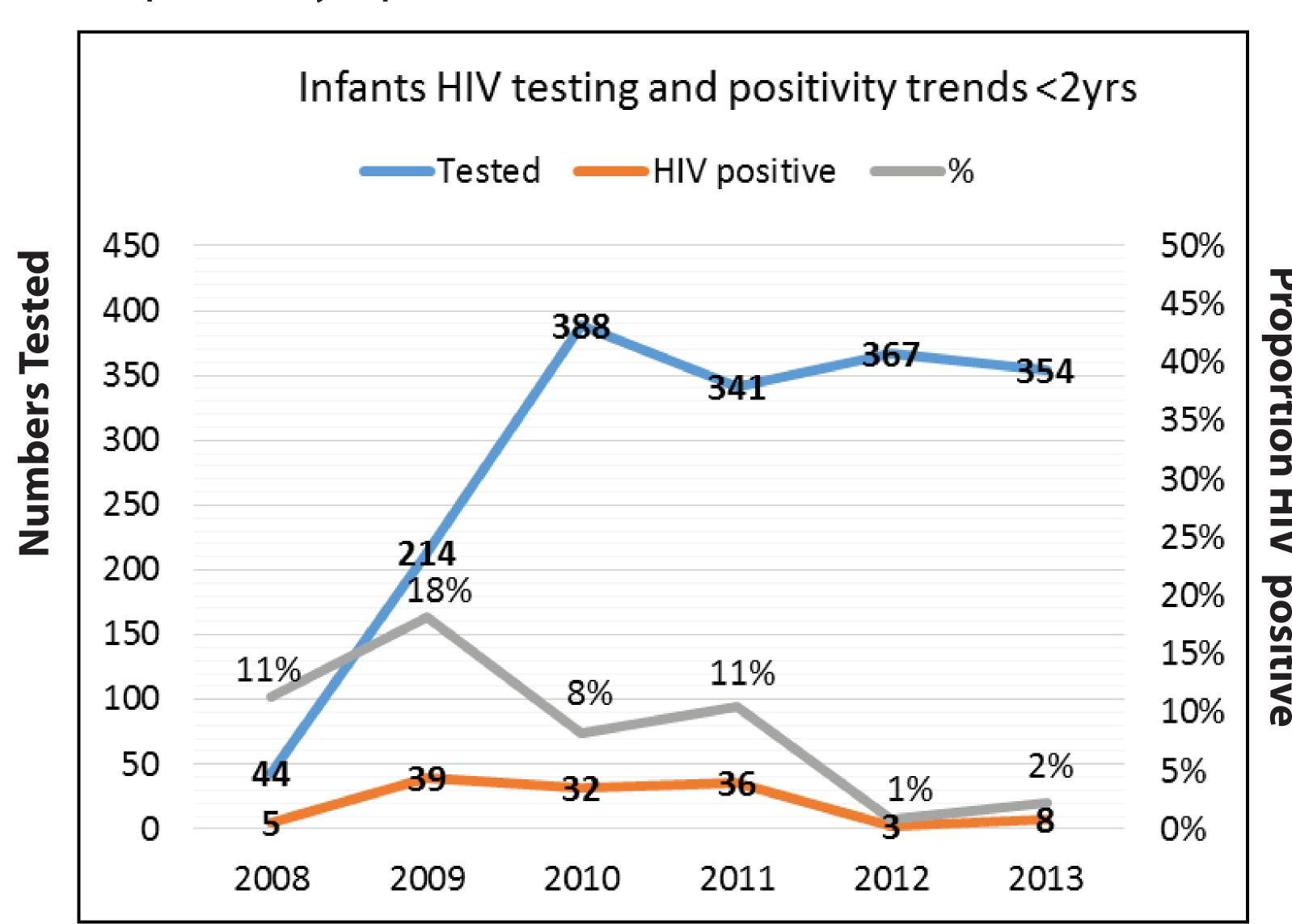
Variable	Year at Enrolment							
	2007	2008	2009	2010	2011	2012	2013	Test of Trend ¹
Active ⁵	220/294	157/211	177/260	143/226	125/182	77/103	76/92	p=0.93
(12 months)	(74.8%	(74.4%	(68.1%)	(63.3%)	(68.7%)	(74.8%)	(82.6%)	
LFU	45/294	35/211	56/260	46/226	33/182	15/103	11/92	p=0.80
Proportions (12 Months)	(15.3%)	(16.6%)	(21.5%)	(20.4%)	(18.1%)	(14.6%)	(12.0%)	
Death Proportions (12 Months)	6/294 (2.0%)	9/211 (4.3%)	7/260(2.7%)	15/226 (6.6%)	3/182 (1.6)	4/103 (3.9%)	2/92(2.2%)	p=0.73
Transfer Outs (12 Months)	14/294 (4.8%)	9/211 (4.3%)	18/260(6.9%)	21/226 (9.3%)	21/182 (11.5%)	7/103 (6.8%)	3/92(3.3%)	p=0.111
Others (12 months)	9/294 (3.1%)	1/211 (0.5%)	2/260(0.8%)	1/226 (0.4%)	0/182 (0%)	0/103 (0%)	0/92(0%)	p=0.001
Retention (12 months)	220/274 (80.1%)	157/193 (81.3%)	177/235 (75.3%)	143/190 (75.3%)	125/158 (79.1%)	77/92 (83.7%)	76/87 (87.4%)	p=0.394

Key for the Tables above

- 1 Tests of Trend: nptrend (Wilcoxon rank-sum test), Logrank and ptrend (chi square test)
 2 Paediatrics enrolled in the respective year and were eligible for during the review period (enrolment date
- to December 2014);
- 3 n is less than the total eligible/Initiated due to missing date of either eligibility or initiation 4 - Median time in days from eligibility for HAART to HAART initiation after enrolment
- 5 Some denominators are less than the total enrolled for the respective year since some paediatrics are
- missing date of discontinuation

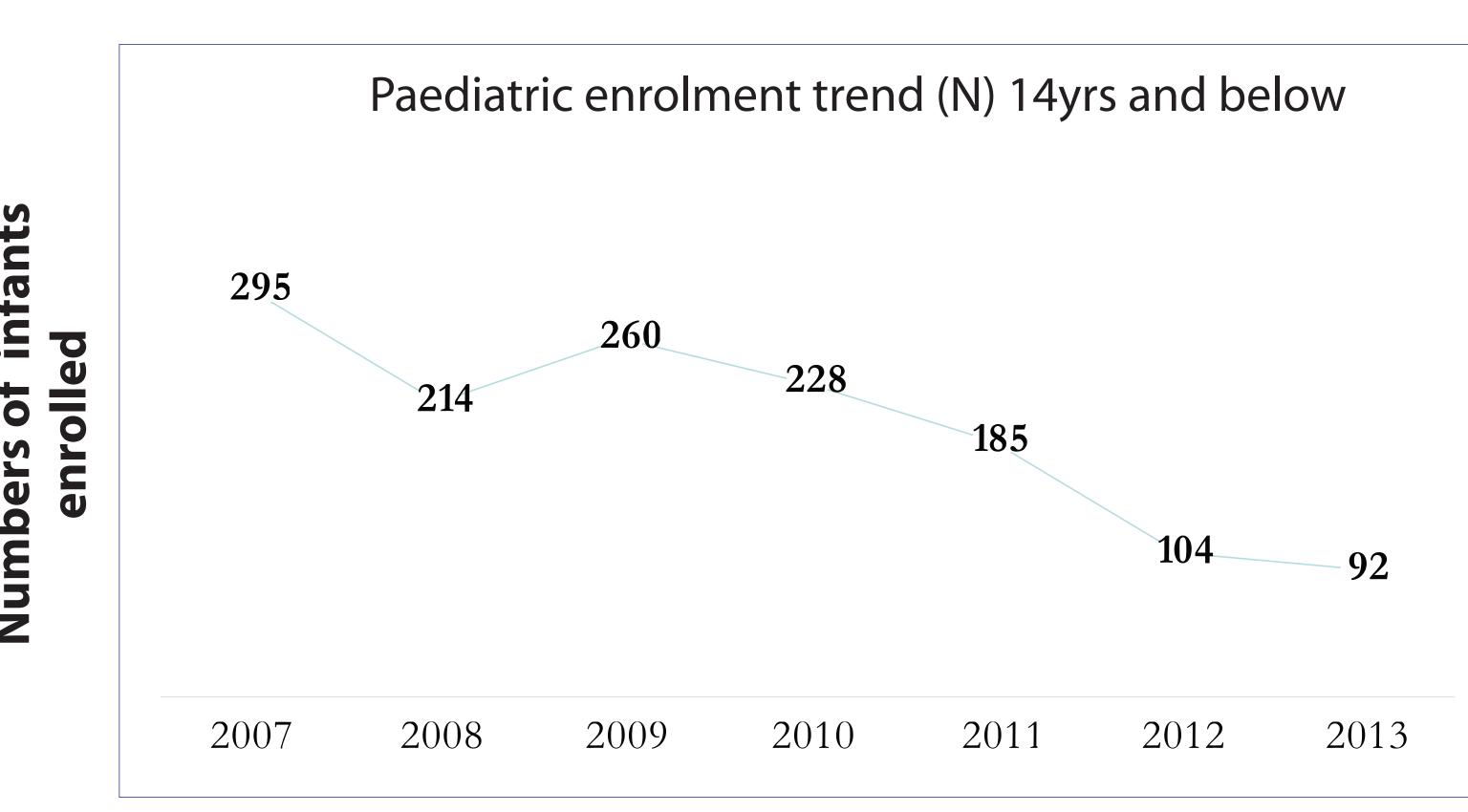
Results cont'd

• HIV-exposed infants testing HIV positive peaked at 18% in 2009 and decreased from 2010 – 2013 (8%, 11%, 1%, 2% respectively) (p<0.001)



Years

• Concurrently, the number of children enrolled yearly decreased over time from 295 in 2007 to 92 in 2013



Years

- Median enrolment age was 3.9 (IQR 1.3, 7.9) years
- Three-quarters of those eligible for ART were initiated
- The median time from eligibility to ART initiation decreased over time, from 33 days in 2007 to 12 days in 2013 (p<0.001)
- No significant trends over time were found in the proportion of pediatric patients active in care (p=0.93), lost to follow-up LTFU) (p=0.80), dead (p=0.73) or transferred out (p=0.111) by 12 months after enrollment
- The proportion of children remaining alive and active in care was lowest in 2010(63%) and highest in 2013 (83%)

Conclusion

• The number of HIV-infected children enrolled into care declined over time, as did infant infections in recent years. Further examination is warranted to determine if declining enrollment may be due to fewer intrapartum and neonatal infections. Time to ART initiation has also declined among newly diagnosed children living with HIV.



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