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Clinical and operational factors associated with low pediatric inpatient HIV testing coverage in Mozambique

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Setting: Eleven pediatric wards in Maputo Province, Mozambique.

Objective: 1) To determine provider-initiated testing and counseling (PITC) coverage, the rate of human immunodeficiency virus (HIV) positivity, and the clinical and facility-level variables associated with PITC; and 2) to assess the care cascade for HIV-exposed and -infected children.

Design: This was a cross-sectional, retrospective review of inpatient charts, selected via systematic randomization, of patients aged 0–4 years, admitted between July and December 2015.

Results: Among the 800 patients included, the median age was 23 months and median duration of hospitalization was 3 days. HIV testing was ordered in 46.0% of eligible patients (known HIV-infected at admission excluded), with results documented for 35.7%, of whom 8.3% were positive. The patient hospitalization diagnoses with the highest PITC rates were malnutrition (73.8%), sepsis (71.4%) and tuberculosis (58.3%), with positivity rates of respectively 16.1%, 20.0%, and 28.6%. Longer hospitalization, weekday admission, and PITC training for staff were significantly associated with better PITC performance. Antiretroviral treatment was initiated during hospitalization for 29.6% of eligible patients.

Conclusion: PITC coverage was low, with high HIV positivity rates, highlighting missed opportunities for diagnosis and linkage to treatment. Strengthened routine testing on wards with consideration of inpatient ART initiation are needed to help achieve pediatric 90–90–90 goals.

The UNAIDS 90–90–90 targets represent an ambitious framework for accelerating human immunodeficiency virus (HIV) testing and antiretroviral therapy (ART) to close diagnosis and treatment gaps, improve retention, reduce morbidity and mortality, and prevent new infections.[1] This is particularly important for children, who continue to lag behind adults in ART coverage and account for 120,000 HIV-related deaths globally each year.[2] In 2016, only 38% of HIV-infected Mozambican children were on ART compared with 55% of adults.[2]

Mozambique has made impressive progress from 2010 to 2016 in scaling up maternal ART coverage (from 18% to 80%) and reducing new annual pediatric infections (from 36,000 to 13,000) through the prevention of mother-to-child transmission of HIV (PMTCT) program and Option B+, the World Health Organization (WHO) recommendation for lifelong ART treatment among HIV-infected pregnant and breastfeeding women.[2] Significant challenges remain, however, with a vertical transmission rate of 14% and poor retention of HIV-exposed infants (HEI). Only 72% of HEI enroll in post-natal care, and only 72% of those get the recommended first DNA polymerase chain reaction (PCR) test before 8 weeks of age through the early infant diagnosis (EID) program.[3] For HEI whose first DNA PCR test result is negative, the EID algorithm calls for repeat testing at 9 months, after cessation of breastfeeding, and when symptomatic. During the time period at the sites in this study, only 31.3% of DNA PCR tests using dried blood spot specimens had results returned in <28 days.[4] The enzyme-linked immunosorbent assay (ELISA) and RNA PCR are not used for EID.

The WHO recommends provider-initiated testing and counseling (PITC) to identify HIV-infected children missed through EID programs, and the Mozambique Ministry of Health (MoH) has embraced PITC to help reach the first UNAIDS 90% target for case identification.[5] National guidelines call for symptom-based testing in certain sectors, including urgent care, and routine opt-out testing in other sectors, including inpatient wards.[6]

An unpublished evaluation of PITC undertaken in 2010 reported testing coverage for adult and pediatric inpatients (excluding maternity wards) ranging between 1.0% and 64.9% by site, and a positivity rate of 17% in children tested in Maputo City. No recent studies have been published, however, and standard MoH and President's Emergency Plan for AIDS Relief indicators do not include the required site, sector, and age disaggregations for meaningful sub-analysis of pediatric inpatient PITC.

This study aimed to address those gaps by evaluating the coverage (% of eligible children tested) and HIV positivity rate, and by identifying the clinical and facility-level factors that influence performance.

STUDY POPULATION, DESIGN, AND METHODS

Study sites and participants

This study was conducted in Maputo Province, Mozambique, excluding Maputo City, which is less representative of the rest of the country in terms of socioeconomic conditions and healthcare capacity. In 2015, Maputo Province had an adult HIV prevalence of 22.9%, compared to a national prevalence of 13.2%.[7] All children aged 0–14 years admitted in July–December 2015 at one of 12 health facilities with pe-

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diatric wards were eligible for inclusion. Patients with charts missing data for age or dates of admission/chart closure were excluded.

Study design

This was a cross-sectional retrospective study. Due to logistical constraints for data collection, a sample-based approach was used instead of reviewing all admissions. Based on 2920 unique admissions during the study period, a 95% confidence level (CL), and a 3% margin of error, sample size was calculated to be 805 patients.[8] The number of patients included from each site was determined proportional to the overall admission volume at the site in question. One hospital with a single patient identified for inclusion was excluded for logistical reasons.

Data collection

The patients were selected via systematic random sampling according to the site enrollment target whereby patients were identified at fixed intervals from ward registers, and charts were retrieved from the archives. If a chart could not be located, the following patient in the register was selected as a replacement. Chart review was performed and data including demographics, diagnoses, maternal HIV status, HIV testing, and treatment with cotrimoxazole preventive therapy (CPT) and ART were recorded on standardized forms. Site-level characteristics including staffing by cadre and PITC training were collected on separate forms. All data were entered into an Excel database (Microsoft Corp, Redmond, WA, USA).

Operational definitions and classifications

The principal outcome, PITC coverage, was defined as the percentage of eligible children who had HIV testing performed during admission, excluding those known to be HIV-infected at admission. A secondary outcome, in-hospital linkage to CPT and ART, was assessed for all HEI and infected children (including those known to be HIV-infected at admission who did not require additional HIV testing, and those known to be HEI at admission who did not have additional testing performed).

Several standard WHO pediatric diagnostic definitions were adapted due to inconsistent or missing information in the hospital charts.[5] Given the known high seroconversion rates in pregnant and lactating women and no routine documentation of the date of the last maternal test, any child not tested was considered to have unknown serostatus, even if the mother was previously HIV-negative.[9,10] Children who were HEI <18 months were only classified as HIV-infected if there was documentation of a positive DNA PCR or initiation of ART, as there is no standard field for presumptive diagnosis. Due to a lack of consistent data regarding breastfeeding and weaning, the exposure window for all HEI was defined as 18 months when not specifically documented.

To facilitate the analysis of PITC according to diagnosis, a list of broad disease categories was defined and individual patient diagnoses were then grouped into one of these general categories by the study pediatrician.

Data analysis

A composite categorical human resource index (HR index) was created for each health facility using factorial analysis for staffing of pediatricians, superior pediatric nurses, and HIV counselors.[11] The staffing variables were loaded into principal component analysis from which one metric factor was retained using the criteria of eingenvalue >1, although the overall statistics of the computation was of mild strength (Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy = 55%, $P < 0.001$, variance explained 64%). The latent HR index was then ranked into two relative categories (high and low) which was used for further statistical analysis.

Frequencies and measures of central tendency with standard deviations were calculated respectively for categorical and numerical variables. The χ^2 test and Fisher's exact test were used to select independent variables with $P < 0.2$ for inclusion in the logistic regression, using a higher P value to avoid possible exclusion of variables that could become significant after including other variables in the analysis.[12] Univariate and multivariate logistic regression were performed to test the association between independent variables and HIV testing using 95% CIs. SPSS v 20 (IBM, Montauk, NY, USA) was used for all statistical analyses.

Ethical considerations

The study was approved by the scientific and ethics committee of the Eduardo Mondlane University School of Medicine (Maputo, Mozambique) and Maputo Central Hospital (Maputo, Mozambique). The study was reviewed according to the US Centers for Disease Control and Prevention (CDC; Atlanta, GA, USA) human research protection procedures and was determined to be research. The CDC did not actively participate in the study. Informed consent was not required. All patient data were anonymized.

RESULTS

Study population characteristics

Of a total of 800 patients included in the study, 5 were excluded for missing data. The median age was 23 months [interquartile range (IQR) 10–40], and the median duration of admission was 3 days [IQR 2–5]. Among the 1280 diagnoses recorded (some patients had more than one), malaria was the most frequent (22.1%) (Table 1).

Health facility characteristics

Of the included sites, 36.4% (4/11) were hospitals, where 80.5% (644/800) of patients included in the study were admitted. There was pediatrician coverage at 54.5% (6/11) of the sites, superior pediatric nurse coverage at 45.5% (5/11), at least one HIV counselor at 72.7% (8/11), and all providers had been trained in PITC at 63.6% (7/11) (Table 2).

Provider-initiated testing and counseling coverage and HIV positivity

Excluding the 72 patients already known to be HIV-infected, 728 patients were eligible for inpatient testing

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Conflicts of interest: none declared.

TABLE 1 Demographic and clinical characteristics of study cohort

Variables	*n*	(%)
Demographic characteristics (*n* = 800)		
Sex		
Male	449	(56.1)
Female	351	(43.9)
Age, months		
0–17	334	(41.8)
18–35	171	(21.4)
36–59	122	(15.3)
⩾60	173	(21.6)
Clinical characteristics (*n* = 800)		
Hospitalization duration, days		
0–3	434	(54.3)
⩾4	366	(45.7)
Day of admission		
Weekend	139	(17.4)
Mid-week	661	(82.6)
Diagnoses (*n* = 1281)		
Malaria	283	(22.1)
Respiratory	207	(16.2)
Hematologic/oncologic (including anemia)	199	(15.5)
Gastroenteritis	193	(15.1)
Other infectious illness	124	(9.7)
Neuropsychiatric (excluding CNS infections)	71	(5.5)
Malnutrition	54	(4.2)
Tuberculosis	37	(2.9)
Surgical	30	(2.3)
Sepsis	15	(1.2)
Other	68	(5.3)

CNS = central nervous system.

(either rapid test or DNA PCR). Of these, 335 (46.0%) had testing ordered, and 260 (35.7%) had results returned (rapid test) or pending (DNA PCR). It was not possible to assess whether any caregivers refused testing. Rapid tests were positive in 8.3% (21/254) of tested patients; with positivity rates of 9.3% (9/97) in children aged <18 months only confirming HIV exposure, and 7.6% (12/157) in children aged ⩾18 months confirming HIV infection (Figure 1). The diagnoses with the highest HIV positivity rates were tuberculosis (TB) (28.6%), sepsis (20.0%), malnutrition (16.1%), and respiratory illnesses (12.2%). PITC coverage was the highest for malnutrition (73.8%), sepsis (71.4%), and TB (58.3%) (Table 3).

Demographic and clinical factors associated with provider-initiated testing and counseling

There were no significant differences in PITC coverage based on age. Hospitalizations of longer duration were associated with improved PITC coverage, odds ratio (OR) 1.61 (95% CI 1.17–2.20), $P = 0.004$. Admission on a weekend was significantly associated with lower PITC coverage, OR 0.49 (95% CI 0.31–0.76), $P = 0.002$. Malnutrition was the only diagnosis with a significant increased odds of PITC being performed in comparison to all other diagnoses, OR 2.76 (95% CI 1.40–5.41), $P = 0.002$, with TB having a non-significant trend, OR 1.89 (95% CI 0.56–6.33), $P = 0.303$ (Table 4).

Health facility factors associated with provider-initiated testing and counseling

There were no significant differences in PITC coverage between health centers and hospitals, OR 1.03 (95% CI 0.71–1.51), $P = 0.868$. Sites with a higher HR index were significantly less likely to perform PITC, OR 0.452 (95% CI 0.27–0.76), $P = 0.003$. Those with >90% of staff formally trained were significantly more likely to perform PITC, OR 3.29 (95% CI 1.78–6.10), $P < 0.001$ (Table 5).

TABLE 2 Characteristics of study sites, and relative proportion of children admitted

	Sites		Hospitalizations	
Variable	Health center (*N* = 7) *n* (%)	Hospital (*N* = 4) *n* (%)	Health center (*N* = 156) *n* (%)	Hospital (*N* = 644) *n* (%)
Pediatrician				
No	5 (71.4)	0	125 (80.1)	0
Yes	2 (29.6)	4 (100)	31 (19.9)	644 (100)
Superior pediatric nurse				
No	5 (71.4)	1 (25.0)	125 (80.1)	72 (11.2)
Yes	2 (29.6)	3 (75.0)	31 (19.9)	572 (88.8)
HIV counselors, *n*				
0	1 (14.3)	2 (50.0)	36 (23.1)	101 (15.7)
1–2	2 (28.6)	1 (25.0)	62 (39.7)	314 (48.8)
⩾3	4 (57.1)	1 (25.0)	58 (37.2)	229 (35.5)
Composite Human Resource Index				
Low	4 (57.1)	2 (50.0)	104 (66.7)	101 (15.7)
High	3 (42.9)	2 (50.0)	52 (33.3)	543 (84.3)
Children admitted/day, average				
1–4	7 (100)	2 (50.0)	156 (100)	101 (15.7)
⩾5	0	2 (50.0)	0	543 (84.3)
Staff PITC trained, %				
⩽80	1 (14.3)	1 (25.0)	6 (3.9)	229 (35.5)
81–90	1 (14.3)	1 (25.0)	37 (23.7)	314 (48.8)
91–100	5 (71.4)	2 (50.0)	113 (72.4)	101 (15.7)

HIV = human immunodeficiency virus; PITC = provider-initiated testing and counseling.

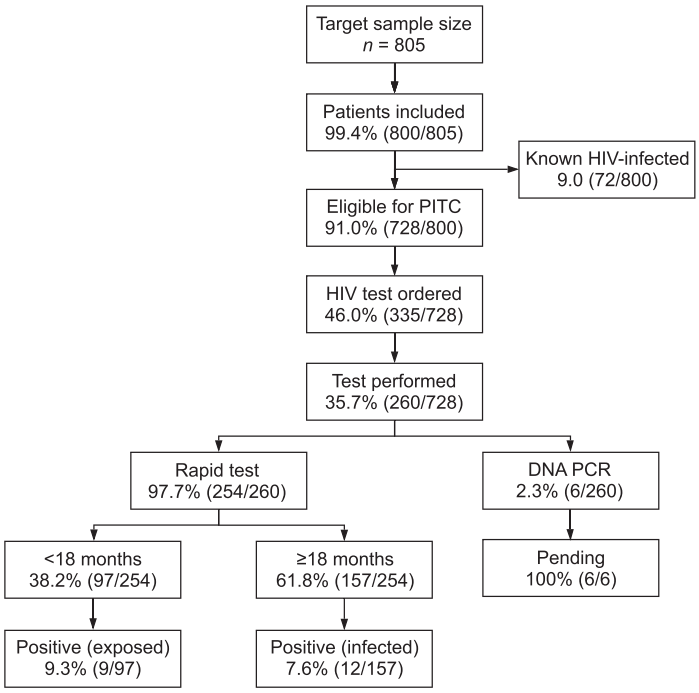

FIGURE 1 PITC coverage and HIV positivity. HIV = human immunodeficiency virus; PITC = provider-initiated testing and counseling; PCR = polymerase chain reaction.

Care cascade for HIV-exposed and -infected children

There were 85 HEI (median age 9.0 months) and 84 HIV-infected children (median age 24.0 months) at the time of chart closure, including children known to be exposed or infected at admission who did not have inpatient HIV testing performed. In HEI children, 21.2% (18/85) received CPT and 7.1% (6/85) had DNA PCR performed during hospitalization. In the HIV-infected children, 58.3% (49/84) received CPT, 67.9% (57/84) were already on ART when admitted, and 29.6% (8/27) of those not on ART at admission were initiated during hospitalization (Figure 2).

DISCUSSION

This study reports a low coverage rate for inpatient pediatric PITC with relatively high HIV positivity rates, demonstrating missed opportunities for diagnosis, even in known high-risk groups. These results are disappointing, considering studies of pediatric ward-based PITC using strategies including group pre-test counseling, bedside testing, and task-shifting in other sub-Saharan African countries, with coverages of 74–98%.[13–20] Other evaluations have shown, however, that in normal public sector conditions, implementation continues to be challenging, with one study in Kenya reporting that 38% of children hospitalized and diagnosed with HIV had a prior admission where they were not tested.[18,21–23]

Previous studies from sub-Saharan Africa reported high pediatric inpatient PITC positivity rates that have been decreasing over time, likely due to the scale-up of PMTCT programs (29.2%, Zambia, 2006–2007; 22.6%, Malawi, 2007–2008; 15.5%, Zambia, 2009–2010; 12.4%, Uganda, 2005–2008).[14,16,17,20] Mozambique has made significant progress with PMTCT but still has an estimated vertical transmission rate of 14%.[3] The positivity rate of 8.3% from this study shows that many of these infected children end up being hospitalized and inpatient PITC is an important back-up to EID.

Children aged <18 months represented 41.8% of the patients in this study. This group had higher rapid test positivity rates than older children, yet was less likely to be tested. Infants should be a priority group for inpatient testing, even when their mothers have documented negative tests from antenatal care, given the significant proportion of new pediatric infections that result from incident maternal infections during pregnancy and breastfeeding.[9,10] Definitive infant diagnosis requires virologic testing, but only 7% of exposed infants in this study had a DNA PCR collected during admission. Long turn-around times for conventional DNA PCR using dried blood spot specimens often precludes these tests from being ordered for hospitalized children who will be discharged for follow-up at local health centers before results return. Even without DNA PCR testing, many hospitalized exposed infants probably met the WHO presumptive diagnosis criteria, but these have been underutilized, and, in this study only one child was presumptively initiated on ART.[13,24] Given these challenges, the allocation of new point-of-care HIV virologic test platforms to high-volume pediatric wards should be considered to expand definitive PITC capacity to the most frequently admitted age group.[25,26]

This study had several findings with operational implications that, if addressed, could improve PITC coverage. Formal training in PITC was significantly associated with better coverage and should be standard for all hospital-based healthcare workers, regardless of cadre. Interestingly, sites with a more favorable HR index had worse PITC performance. Counselors are factored into this index and often assigned other tasks in the health facility,

TABLE 3 PITC coverage and HIV positivity by diagnosis (excludes patients known to be HIV-infected at admission)

	Diagnosed *n*	Tested *n*	Coverage %	Positive *n*	Positivity %
Malaria	275	99	36.0	2	2.0
Gastroenteritis	181	88	48.6	8	9.1
Respiratory	169	74	43.8	9	12.2
Hematologic/oncologic	167	68	40.7	5	7.4
Other infectious illness	100	44	44.0	1	2.3
Neuropsychiatric	70	31	44.3	0	0.0
Other	63	30	47.6	2	6.7
Malnutrition	42	31	73.8	5	16.1
Surgical	29	14	48.3	1	7.1
Sepsis	14	10	71.4	2	20.0
Tuberculosis	12	7	58.3	2	28.6

PITC = provider-initiated testing and counseling; HIV = human immunodeficiency virus.

TABLE 4 Demographic and clinical factors associated with PITC

	Univariate regression		Multivariate regression	
Variable	OR (95% CI)	*P* value	OR (95% CI)	*P* value
Sex				
Male	Reference		—	
Female	0.92 (0.68–1.25)	0.627	—	
Age, months				
0–17	Reference		Reference	
18–35	0.98 (0.65–1.47)	0.944	0.95 (0.62–1.45)	0.806
36–59	1.24 (0.79–1.93)	0.334	1.39 (0.88–2.20)	0.164
⩾60	1.36 (0.91–2.02)	0.132	1.41 (0.92–2.16)	0.119
Hospitalization duration, days				
0–3	Reference		Reference	
⩾4	1.66 (1.22–2.26)	0.001	1.61 (1.17–2.20)	0.004
Day of admission				
Mid-week	Reference		Reference	
Weekend	0.46 (0.29–0.71)	<0.001	0.49 (0.31–0.76)	0.001
Diagnoses				
Malaria	0.82 (0.60–1.12)	0.220	—	
Gastroenteritis	1.04 (0.73–1.48)	0.808	—	
Respiratory disease	0.92 (0.64–1.32)	0.676	—	
Hematologic/oncologic	1.01 (0.70–1.45)	0.936	—	
Other infectious illness	0.98 (0.63–1.53)	0.953	—	
Neuropsychiatric	1.45 (0.88–2.38)	0.144	1.65 (0.97–2.80)	0.063
Other	1.56 (0.92–2.62)	0.094	1.46 (0.86–2.51)	0.164
Malnutrition	3.05 (1.60–5.81)	0.001	2.76 (1.40–5.41)	0.003
Surgical conditions	1.07 (0.50–2.31)	0.849	—	
Sepsis	0.97 (0.32–2.94)	0.966	—	
Tuberculosis	2.50 (0.78–7.95)	0.121	1.89 (0.56–6.33)	0.303

PITC = provider-initiated testing and counseling; OR = odds ratio; CI = confidence interval.

likely contributing to lower coverage. Other studies have shown that having MoH or partner-supported lay staff dedicated to HIV counseling and testing improves coverage.[18,21] Children admitted on weekends and those admitted for <3 days were less likely to be tested. Policies for routine testing at the time of admission, regardless of the day of the week, are needed. It was also noted during data collection that current versions of MoH hospital forms and registers could be improved to better organize relevant data and incorporate additional data fields to facilitate monitoring and evaluation of inpatient PITC.

In areas of lower HIV prevalence, the yield of pediatric inpatient PITC will be lower and routine opt-out testing might not be optimal.[27] A recent study from Malawi had only a 1.1% pediatric HIV prevalence rate, and concluded that a targeted testing approach may be more feasible and cost-effective.[28,29] Mozambique has a regionally diverse HIV epidemic, and, given the low overall PITC coverage in this study, consideration could be given to targeted approaches that increase the likelihood that those most at risk of infection be tested, but routine pediatric inpatient PITC should still be the norm.[7]

HIV-infected children identified through ward-based PITC have historically been referred to outpatient clinics for ART initiation after discharge.[20,30,31] While early ART initiation in hospitalized children has not been shown to improve mortality,

TABLE 5 Health facility factors associated with PITC

	Univariate regression		Multivariate regression	
Variable	OR (95% CI)	*P* value	OR (95% CI)	*P* value
Type of facility				
Health center	Reference		—	
Hospital	1.03 (0.71–1.51)	0.868	—	
Human Resource Index				
Low	Reference		Reference	
High	0.287 (0.20–0.41)	<0.001	0.452 (0.27–0.76)	0.003
Staff PITC trained, %				
⩽80	Reference		Reference	
81–90	2.83 (1.88–4.28)	<0.001	2.69 (1.78–4.07)	<0.001
91–100	6.23 (3.95–9.84)	<0.001	3.29 (1.78–6.10)	<0.001

PITC = provider-initiated testing and counseling; OR = odds ratio; CI = confidence interval.

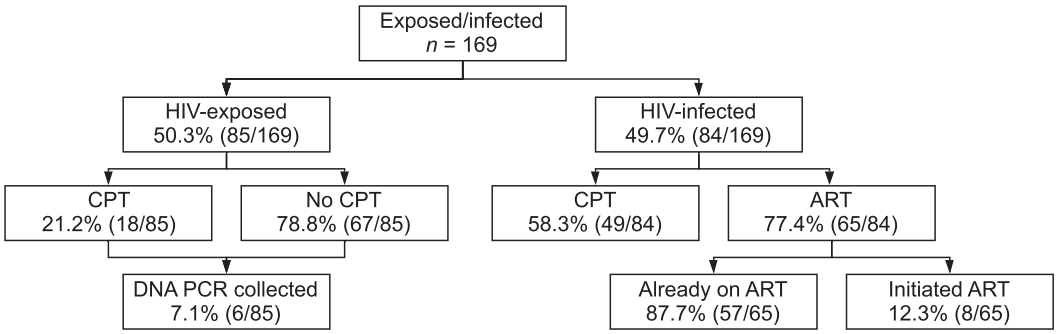

FIGURE 2 HIV care cascade for exposed and infected children. HIV = human immunodeficiency virus; CPT = cotrimoxazole preventive treatment; ART = antiretroviral therapy; PCR = polymerase chain reaction.

the efficacy of inpatient initiation in improving linkage to ART has not been documented, but has been identified as a knowledge gap and research priority.[32,33] In this study, only 29.6% (8/27) of newly diagnosed HIV-infected children initiated ART while hospitalized. Inter-facility referral between hospital wards and local health centers is a known vulnerable point for continuity, and the impact of inpatient ART on linkages needs further study, particularly given the potential benefits of more intensive counseling and early adherence monitoring during hospitalization.[27]

This study had certain methodologic limitations. The inpatient charts do not have defined fields for last maternal HIV test date nor date of weaning from breastmilk, and assumptions had to be made about HIV exposure that likely resulted in the misclassification of some infants. It is also possible that PITC occurred but was not documented in the chart or registers, particularly for children with TB. Also, it was not possible to verify linkage to ART for infected children after discharge. We were not able to perform a multilevel statistical analysis to determine if individual level characteristics were driving associations seen at the site level, or vice versa. Finally, the study only included wards in one of the highest prevalence provinces of Mozambique, possibly limiting applicability to other lower prevalence areas. The retrospective study design likely gives a better representation of operational reality, however, than do studies of focused PITC interventions.

At the end of 2017, estimates for the pediatric 90–90–90 targets in Mozambique were respectively 48%, 53%, and 73%.[3] Urgent action is needed to identify the large numbers of undiagnosed children living with HIV and link them to ART if the goals are to be met by 2020. Many of these children will end up being hospitalized, and strengthened routine opt-out PITC on pediatric wards with inpatient ART initiation needs to be a programmatic priority.

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Cadre : Onze services de pédiatrie dans la province de Maputo, Mozambique.
Objectif : Déterminer la couverture, le taux de positivité du virus de l'immunodéficience humaine (VIH) et les variables cliniques et liées aux structures associées au test et au conseil initiés par les prestataires de soins auprès de patients hospitalisés (PITC) vis-à-vis du VIH et évaluer la cascade de soins des enfants exposés au VIH et infectés par la VIH.
Méthode : Une revue transversale rétrospective de dossiers de patients hospitalisés, sélectionnés de façon aléatoire, âgés de 0–14 ans, admis entre juillet et décembre 2015.
Résultats : Sur les 800 patients inclus, l'âge médian a été de 23 mois et la durée médiane d'hospitalisation a été de 3 jours. Les tests VIH ont été réalisés chez 46,0% des patients éligibles (à l'exclusion de ceux connus comme infectés par le VIH lors de l'admission), avec des résultats documentés pour 35,7%, dont 8,3% ont été positifs. Les diagnostics les plus fréquents lors de l'hospitalisation des PITC ont été la malnutrition (73,8%), une infection grave (71,4%) et la tuberculose (58,3%), avec des taux de positivité de 16,1%, 20,0% et 28,6%, respectivement. Une hospitalisation plus longue, une admission un jour de semaine et une formation PITC pour le personnel ont été significativement associées à une meilleure performance des PITC. Le traitement antirétroviral (TAR) a été initié pendant l'hospitalisation pour 29,6% des patients éligibles.
Conclusion : La couverture des PITC a été faible, avec des taux de positivité élevés, mettant en lumière des opportunités manquées de diagnostic et de lien avec le traitement. Un renforcement du test en routine dans les services hospitaliers en considérant la mise en route du TAR pendant l'hospitalisation est nécessaire pour atteindre les objectifs pédiatriques de 90/90/90.

Marco de referencia: Once departamentos de pediatría en la Provincia de Maputo en Mozambique.
Objetivo: Determinar la cobertura, la tasa de positividad frente al virus de la inmunodeficiencia humana (VIH) y definir las variables clínicas e institucionales asociadas con la práctica del consejo y las pruebas del VIH por iniciativa del profesional (PITC), practicados de manera corriente a los pacientes hospitalizados y evaluar la continuidad asistencial de los niños expuestos al VIH o infectados por el mismo.
Método: Fue este un estudio transversal retrospectivo con examen de las historias clínicas de pacientes entre 0 y 14 años de edad, escogidos de manera aleatoria y hospitalizados entre julio y diciembre del 2015.
Resultados: De los 800 pacientes incluidos, la mediana de la edad fue 23 meses y la mediana de la estancia hospitalaria fue 3 días. Se solicitó la prueba del VIH a 46,0% de los pacientes que cumplían los requisitos (se excluyeron los pacientes cuya infección por el VIH se conocía en el momento de la hospitalización) y se recuperó el resultado de 35,7%, de los cuales 8,3% eran positivos. En los pacientes con una mayor tasa de PITC, los diagnósticos de hospitalización más frecuentes fueron desnutrición (73,8%), septicemia (71,4%) y tuberculosis (58,3%) y presentaron tasas de positividad de 16,1%, 20,0% y 28,6%, respectivamente. Los factores que se asociaron con un mayor rendimiento de la PITC fueron una estancia más prolongada, la hospitalización en un día de entre semana y la capacitación del personal en materia de PITC. El tratamiento antirretrovírico (TAR) se inició durante la hospitalización de 29,6% de los pacientes que cumplían las condiciones.
Conclusión: La cobertura de la PITC fue baja, con altas tasas de positividad, lo cual pone de relieve las oportunidades desaprovechadas de diagnóstico y vínculo con los servicios de tratamiento. Con miras a alcanzar las metas 90/90/90 pediátricas, es necesario reforzar la práctica corriente de las pruebas del VIH en los servicios y considerar la posibilidad de iniciar el TAR.

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