



ELIZABETH GLASER
PEDIATRIC AIDS
FOUNDATION

Collecting routine infant feeding indicators: A pilot study in Lesotho.

Children and HIV: Start Early, Start Now!

Symposium July 19, 2014

Appolinaire TIAM, MBChB, DipHIVMan, MMed

Country Director

Elizabeth Glaser Pediatric AIDS Foundation

Lesotho Health Profile

- Population ~ 2 million
- 360,000 people are living with HIV in Lesotho; 37,000 are children
- Of women attending antenatal care services 25.9% are HIV-positive
- First ANC attendance 91.8%
- Health facilities based deliveries 69.8%
- Severe human resource constraints



ANC HIV Sentinel Surveillance Report, 2013; UNAIDS 2013; LDHS-MOH, 2009; MOH Annual Joint Review, 2013.

Why an indicator for HIV and infant feeding?

- Infant feeding practice, especially in the first 6 months of life, greatly impacts child survival
- For HIV-infected mothers, feeding practice also has implications for HIV transmission, especially in the absence of antiretroviral (ARV) medications
- National guidelines in Lesotho recommends exclusive breastfeeding in the first six months of life with introduction of supplementary feeding from 6 months.
- For HIV infected women, infants receive prophylaxis in the first six weeks while the mother is on life long ART (option B+).
- Information on infant feeding is integrated in the under five register along with HIV exposure status of the infants.

Why an indicator for ARV uptake?

- HIV and infant feeding guidelines changed after first field test in Zambia started
- National authorities now recommended to promote and support either breastfeeding or replacement feeding for all mothers
- Where breastfeeding recommended, assumption is that HIV-infected mothers or their infants will take ART/ARVs during breastfeeding period
- Need to capture information on uptake for planning/decision-making, individual counselling

Proposed indicators

- Infant feeding:
 - Percentage of HIV-exposed infants who are exclusively breastfeeding (EBF) at 3 months of age (DPT3)
 - Percentage of HIV-exposed infants who are on exclusive replacement feeding (ERF) at 3 months of age
 - Percentage of HIV-exposed infants who are mixed feeding (MF) at 3 months of age
- ARVs:
 - Percentage of HIV-exposed breastfed infants who are given recommended ARVs at either EID or DPT3 visit.

Objectives of the Study

To determine how best to routinely collect infant and young child feeding practices at primary health care facilities and assess whether indicators routinely collected reflect actual practices.

Methods

- Cross sectional survey.
- Study sites: 6 under-five clinics in three districts of Lesotho.
- Mothers/caregivers of infants <6 months leaving the clinic after a routine antenatal clinic visit were interviewed on their infant feeding practices and responses compared with health care worker's documentation in under five register.
- Sample size: 603 mothers/caregivers
 - 211 infants were HIV-exposed or HIV-positive
- Data collected over a period of 6 weeks from November to December 2012.

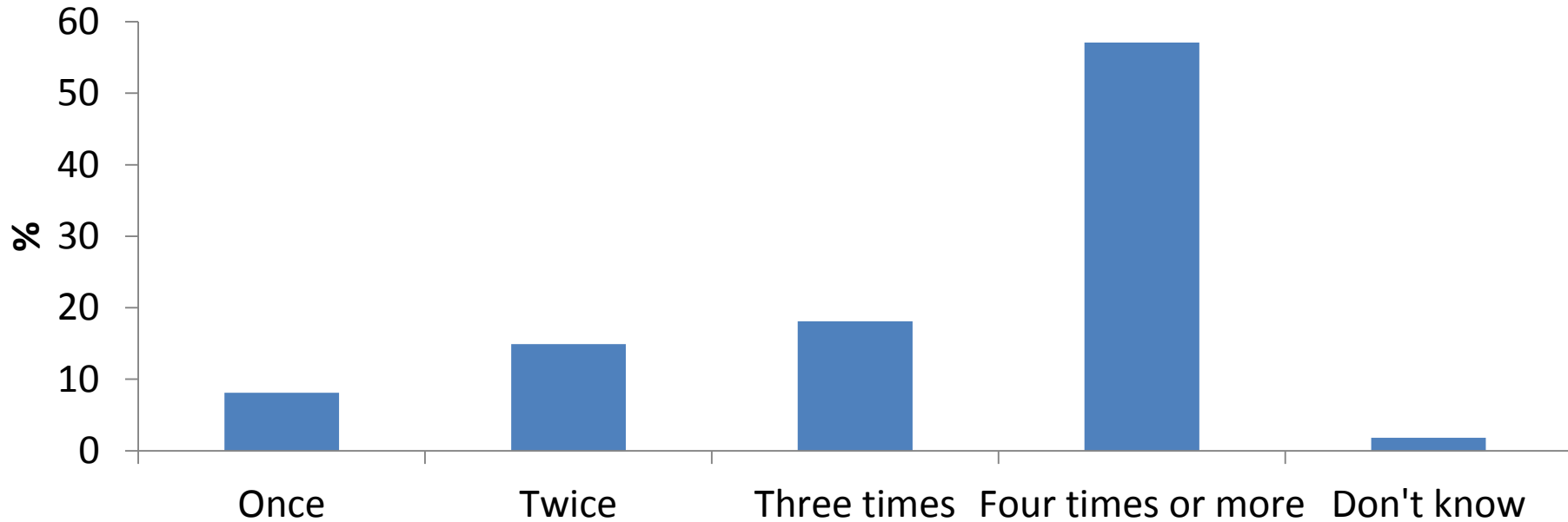
Key questions

- Routine question from health staff: “*What did you give your infant to eat or drink yesterday during the day and during the night?*” (24 hour recall)
- “Since the baby was born, have you given him/her any medicine to help make sure she/he does not become HIV+?”
 - If yes, “What medicine are you giving the child?”



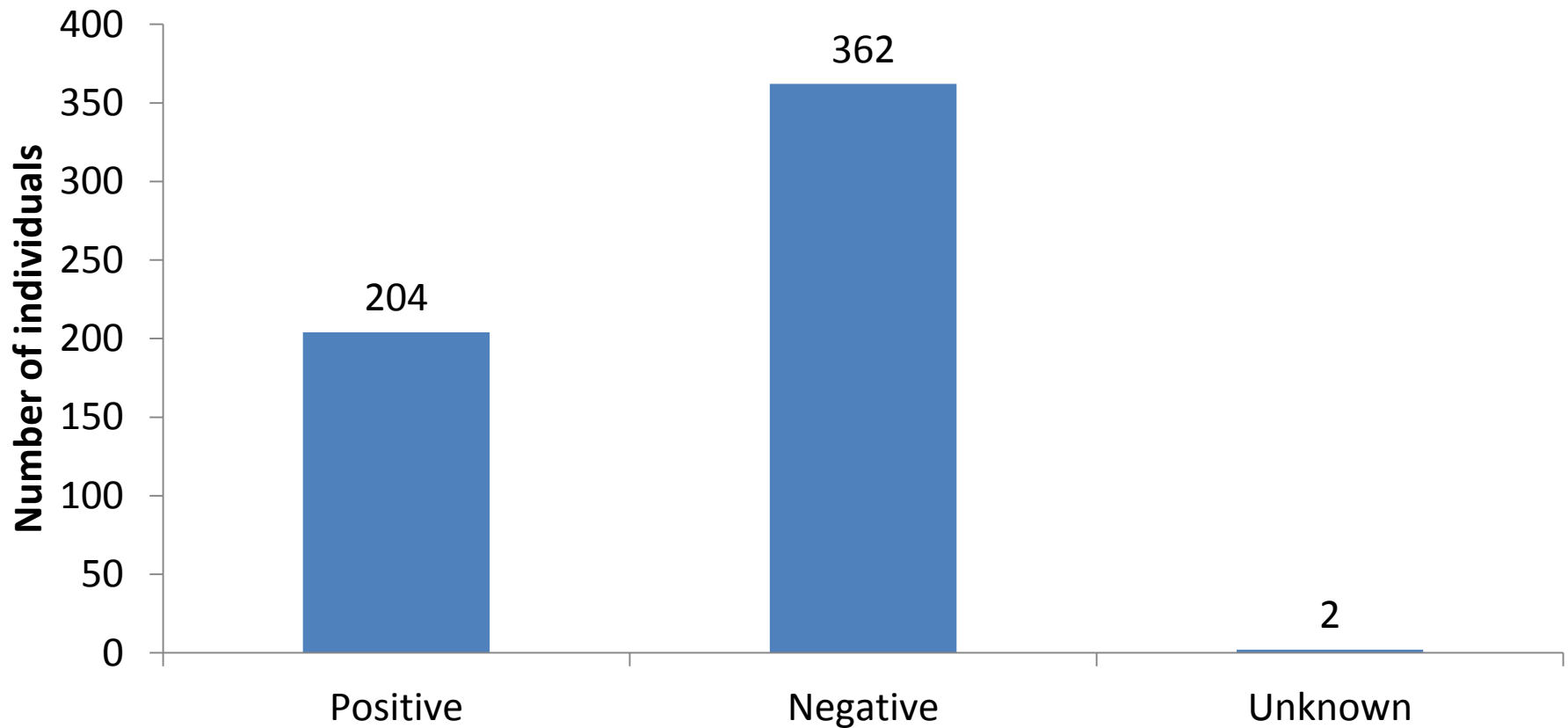
Rate of ANC Attendance Among Mothers

IYCF counseling received during previous ANC (N=504)



- The vast majority of mothers attended ANC at least once before the birth of their most recent infant, with 69.7% reporting attending 4 times or more
- Of those who ever attended ANC, 90.5% (N=504) reported receiving information or counseling on how to feed their most recent baby

HIV Testing Among Mothers



- All of the mothers (N=577) in the study reported having been tested for HIV at some time, and 95.8% (N=553) knew their HIV status while expecting their most recent infant.
- Overall, 204 women (36%) were HIV-positive

Age of infants (n=603)

Age of infants (in months)	N (%)
<1	64 (10.6)
1	152 (25.2)
2	170 (28.2)
3	113 (18.7)
4	42 (7.0)
5	51 (8.5)
6	11 (1.8)

Median age of the mothers was 24 years with a range from 15 to 45 years

General feeding practices at birth (N=603)

Feeding Practice:	N (%)
Breastfed	568 (94)
Expressed breast milk	2 (0.33)
Water	7 (1)
Other milks (eg. formula)	32 (5)
Other liquids (eg. Traditional medicines)	0
Other foods	1 (0.17)
Don't know	1 (0.17)

Exit interview data: infant feeding practices among all caregivers within the last 24 hrs

Response recorded during counseling session in clinic	Exit interview result			
	Exclusive breastfeeding	Exclusive replacement feeding	Mixed feeding	Total
Exclusive breastfeeding	462	10	12	484 (80.4%)
Exclusive replacement feeding	10	56	8	74 (12.3%)
Mixed feeding	16	11	17	44 (7.3%)
Total	488 (80.9%)	77 (12.9%)	37 (6.1%)	602

There was over 88% agreement ($\kappa = 0.66$) between responses recorded in the registers and those collected during the exit interviews

Infant feeding and HIV status of the mother

(n=565)

	Exit interview result		
HIV status of the mother	Exclusive breastfeeding	Exclusive replacement feeding	Mixed feeding
HIV-positive	163 (80%)	34 (17%)	6 (3%)
HIV-negative	306 (85%)	22 (6%)	34 (9%)

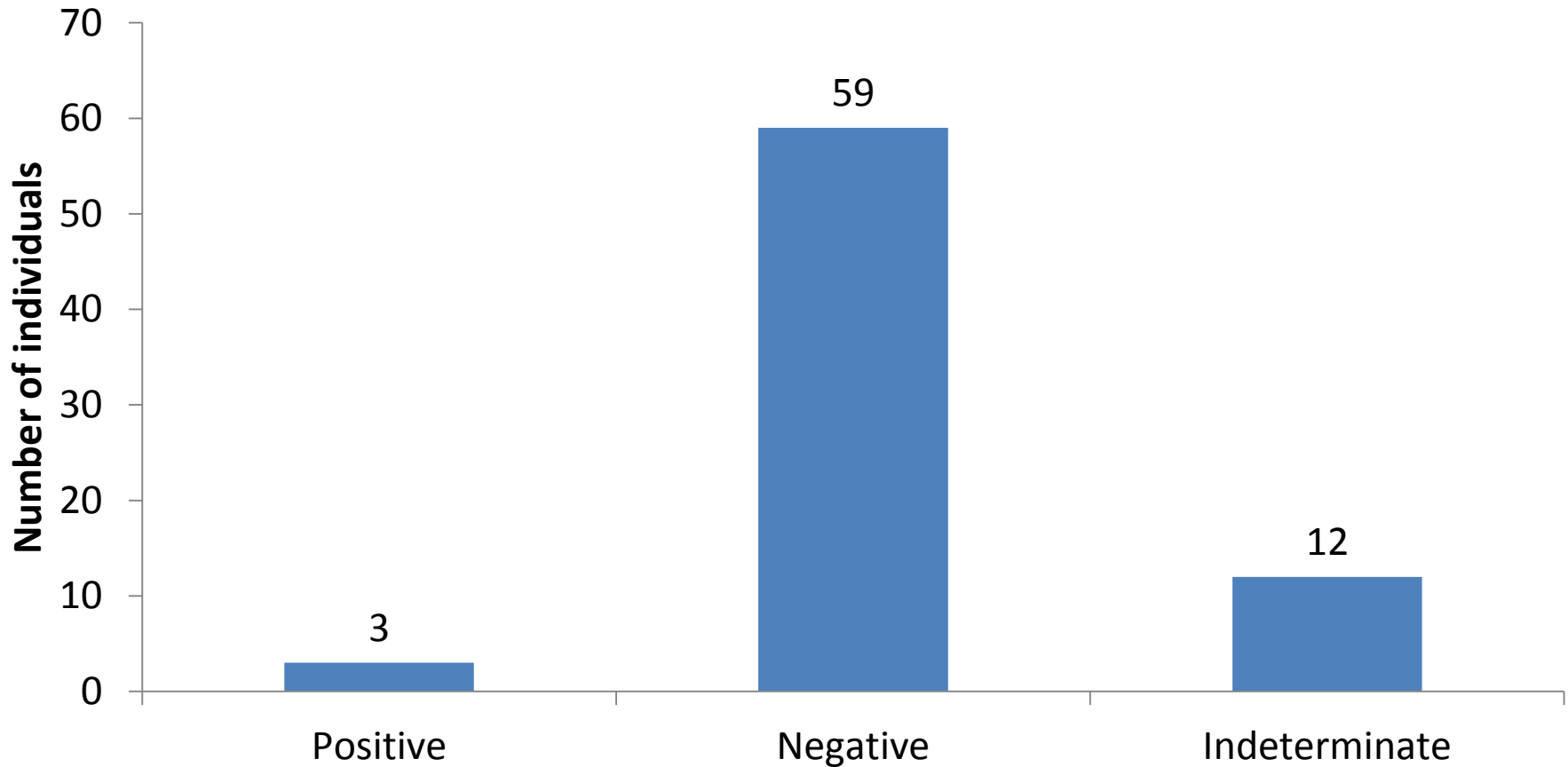
- Of the 204 mothers who reported being HIV-positive, 189 (93%) were given NVP for PMTCT

Exit interview data: infant feeding practices among caregivers of HIV-exposed infants within the last 24 hrs

Response recorded during counseling session in clinic	Exit interview result			
	Exclusive breastfeeding	Exclusive replacement feeding	Mixed feeding	Total
Exclusive breastfeeding	86	3	2	91 (81%)
Exclusive replacement feeding	2	10	1	13 (12%)
Mixed feeding	3	0	5	8 (7%)
Total	91 (81%)	13 (12%)	8 (7%)	112

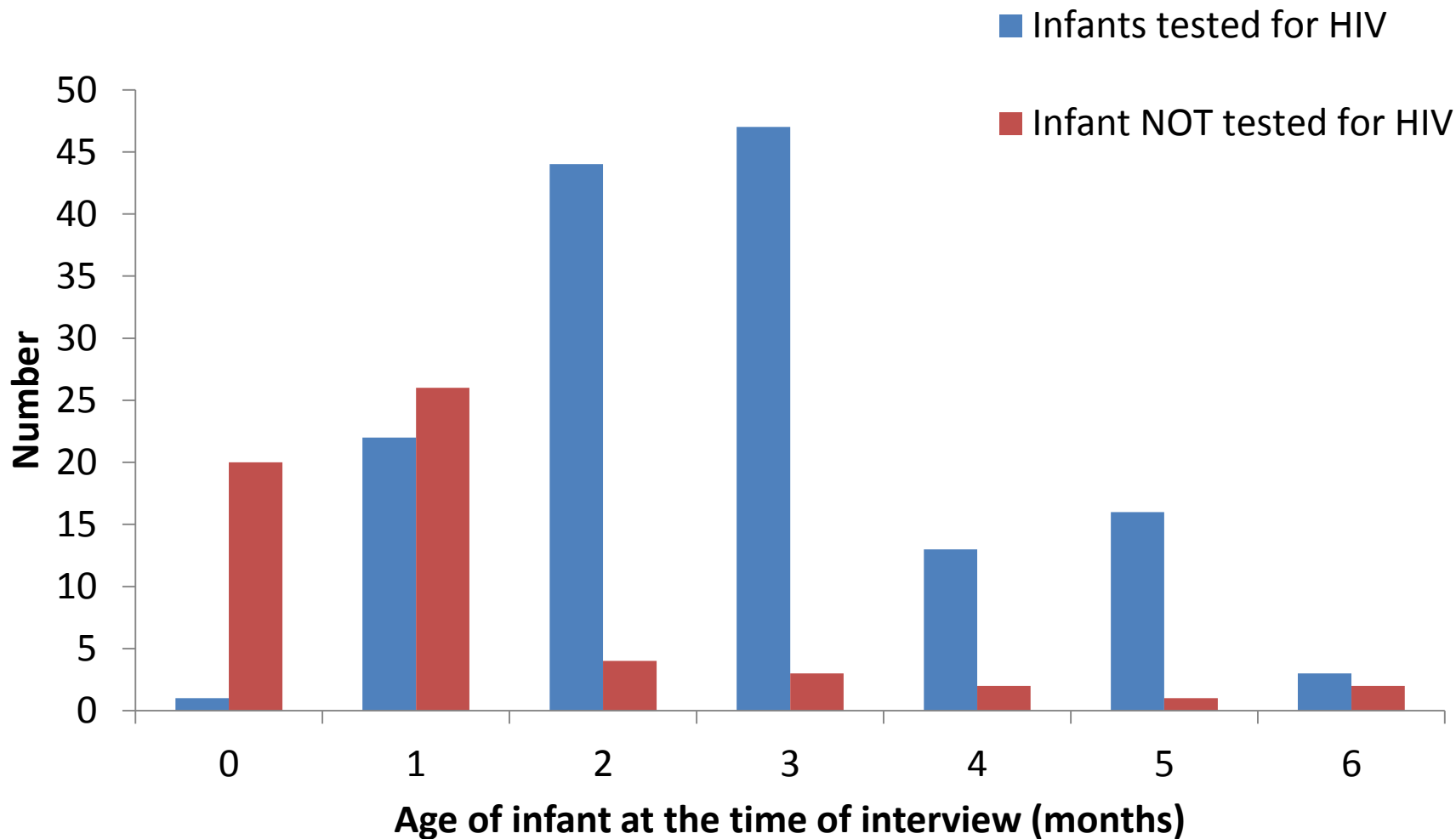
There was a 90.2% agreement ($\kappa = 0.69$) in responses from registers and those collected in the exit interviews.

DNA-PCR Testing Among HIV Exposed Infants



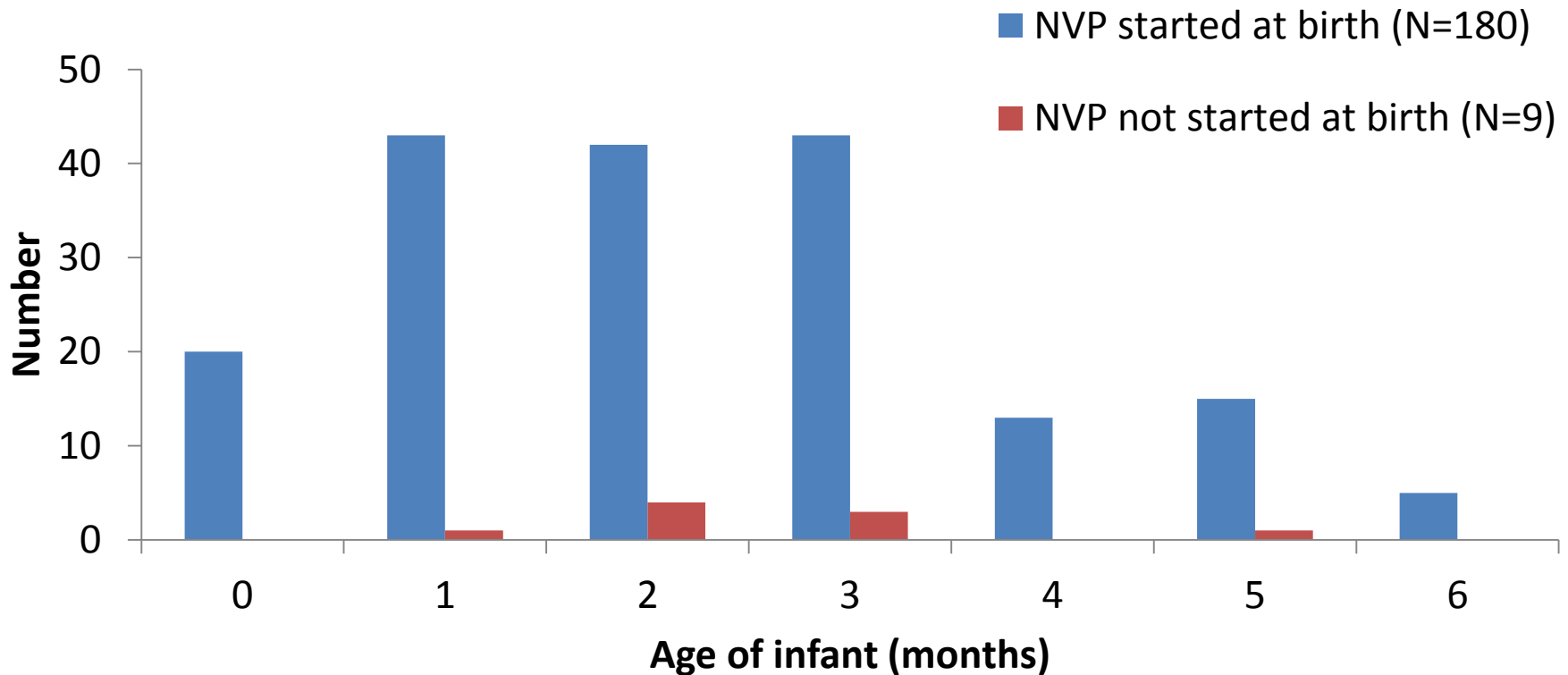
- While the majority of HIV-exposed infants were tested for HIV (71.6%/N=146), only 74 HIV-positive (50.7%) mothers had received the HIV test result for their exposed infant –3(4.1%) of those infants were HIV-positive.

HIV-exposed infants (N=204) tested for HIV by age



71.6% of their HIV-exposed infants had been tested

HIV-exposed infants (N=189) who initiated NVP at birth by age



- 98% of HIV-exposed infants received NVP at birth

Conclusions/Recommendations

- The indicators collected by health workers in routine ANC/infant care were concordant with exit interviews
- The infant feeding information should be collected routinely by health worker staff
- Appropriate tools should be developed for monitoring IYCF in sites in Lesotho

Acknowledgements

- **Study team**

- Appolinaire Tiam (PI)
- Emily Bobrow (PI)
- Rhoderick Machekano
- Malijane Nyabela
- Leopold Buhendwa
- Thithidi Ma-Isaaka
Diaho
- Lisemelo Seheri
- Anthony Isavwa
- Cori Mazzeo

- **WHO-Geneva**

- Nigel Rollins
- Peggy Henderson
- Chika Hayashi
- Ministry of Health
- Study district teams facility staff
- Study participants
- EGPAF Lesotho Program Mentors
- EGPAF Lesotho nutritionists
- EGPAF Lesotho MCH nurses
- Data collection

Thank you!