Effects of Integration on the PMTCT Cascade

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The PMTCT CASCADE

All Pregnant women

HIV-positive Pregnant women

- Attend ANC clinic
- Be offered and accept HIV testing
- Get CD4 assessment
- Be given ARVs
- Enroll in HIV care and treatment
- Adhere to ARVs during pregnancy
- Deliver with skilled attendant & take ARVs
- Follow safe infant feeding practices
- Bring infant for HIV testing
- Adhere to maternal/infant ARVs after birth
- Use postpartum family planning

Get baseline CD4

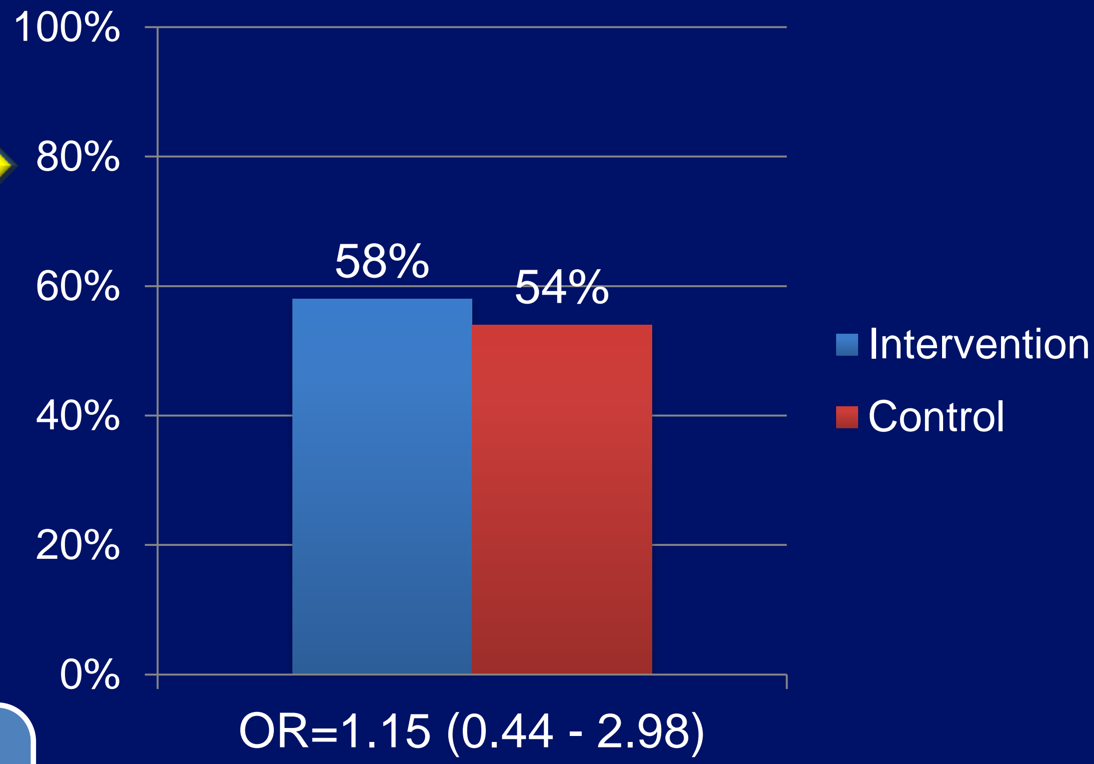
Be given ARVs

Enroll in HIV care and treatment

Adhere to ARVs during pregnancy

Deliver with skilled attendant and take ARVs

Bring infant for HIV testing



Get baseline CD4

Be given ARVs

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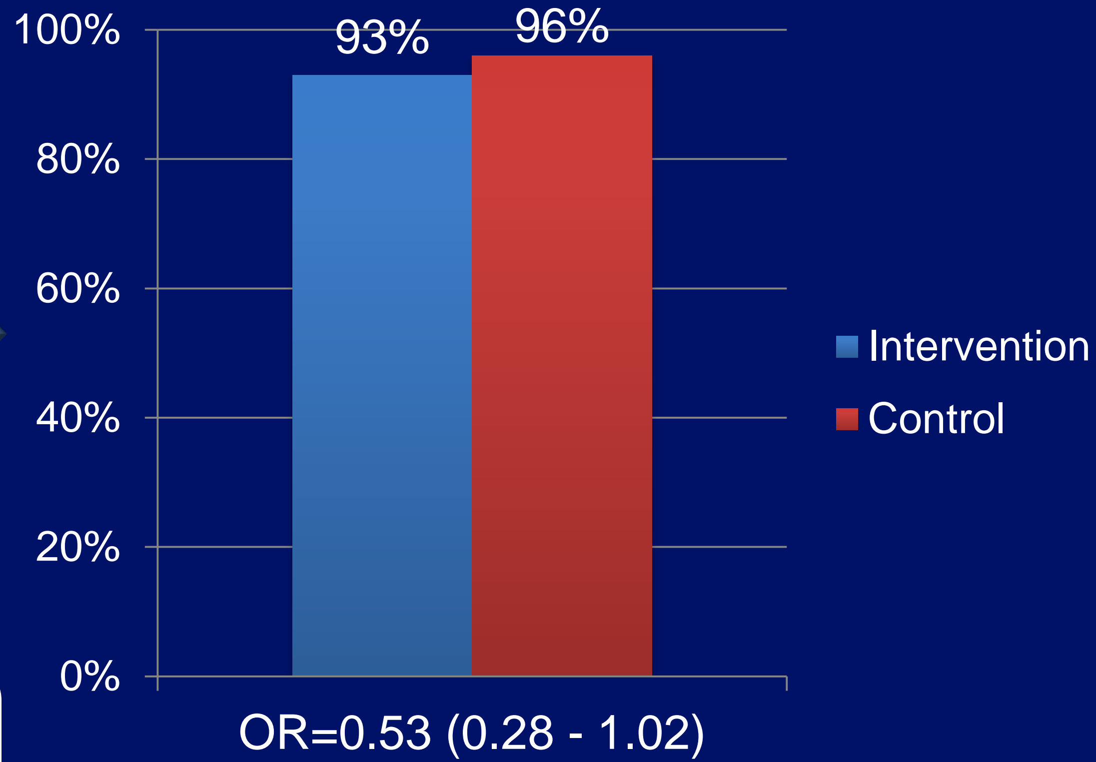
Deliver with skilled attendant and take ARVs

Bring infant for HIV testing



Get baseline CD4

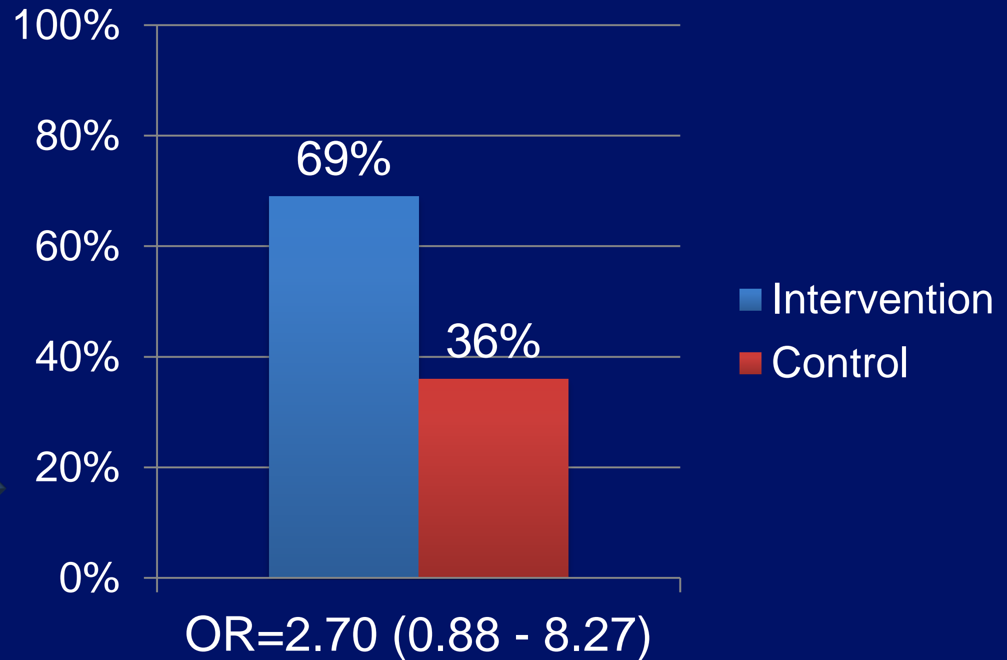
Be given ARVs

Enroll in HIV care and treatment

Adhere to ARVs during pregnancy

Deliver with skilled attendant and take ARVs

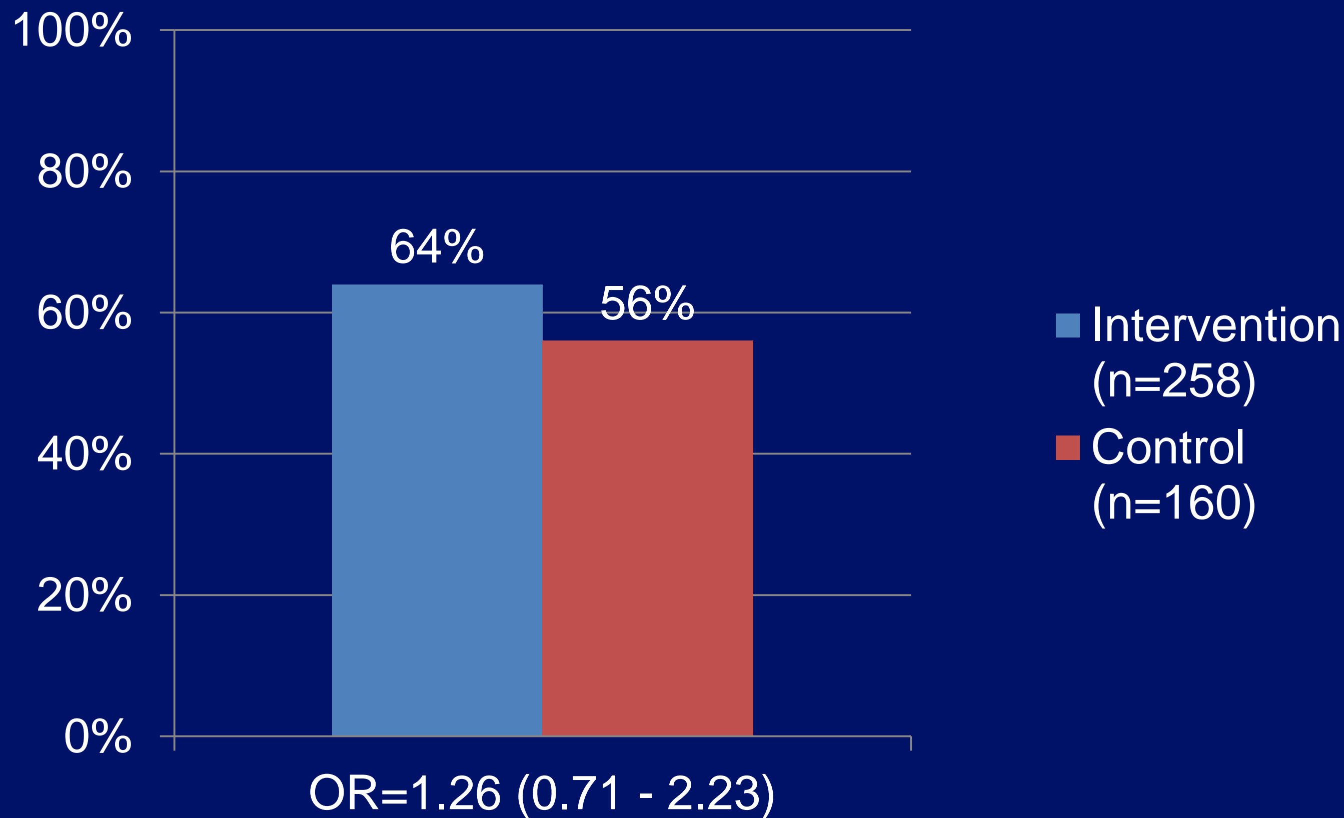
Bring infant for HIV testing



Median time to enrollment in HIV care:

- Intervention sites: 0 days
- Control sites: 8 days
  - HR = 2.2 (1.62-3.01)

Retention in Care among Enrolled Women



Get baseline CD4

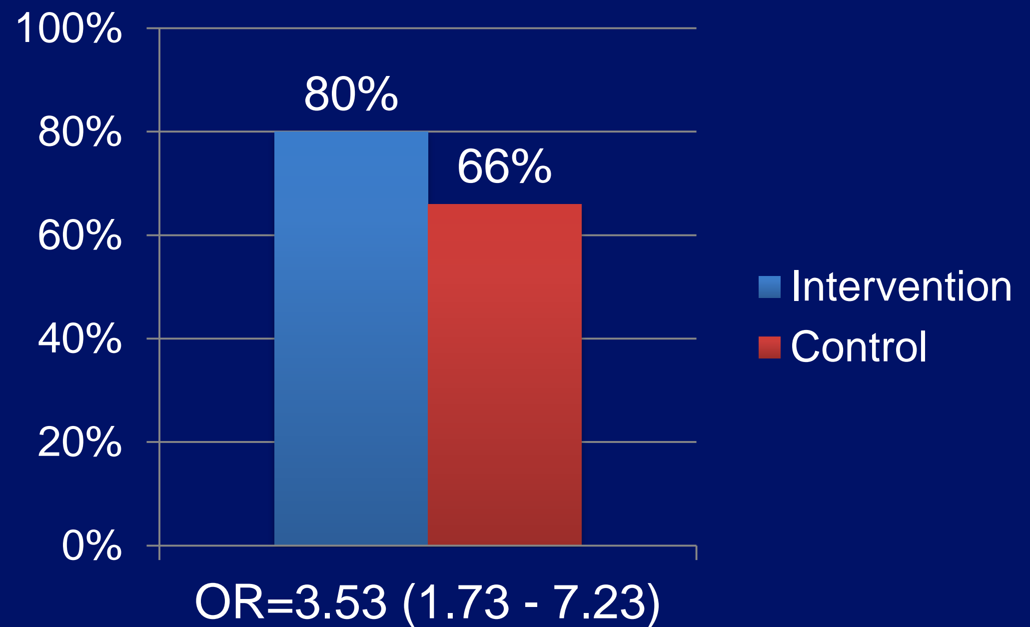
Be given ARVs

Enroll in HIV care and treatment

Adhere to ARVs during pregnancy^

Deliver with skilled attendant and take ARVs

Bring infant for HIV testing



^Self report from women with postpartum forms (n=325)

Get baseline CD4

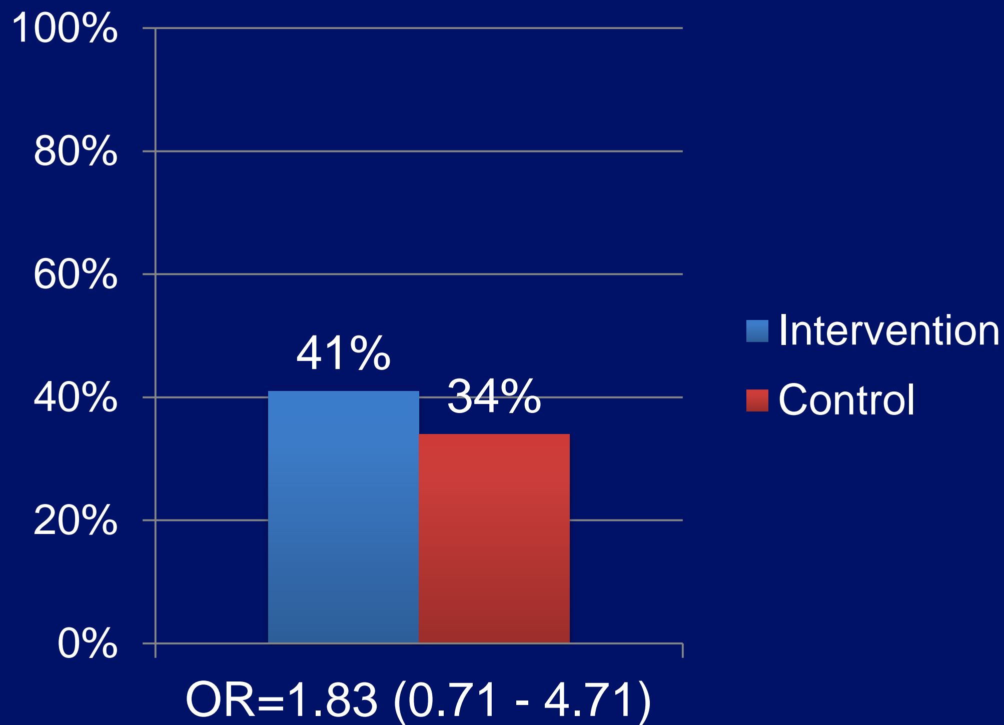
Be given ARVs

Enroll in HIV care and treatment

Adhere to ARVs during pregnancy^

Delivery in a health facility^

Bring infant for HIV testing



^Self report from women with postpartum forms (n=325)

Get baseline CD4

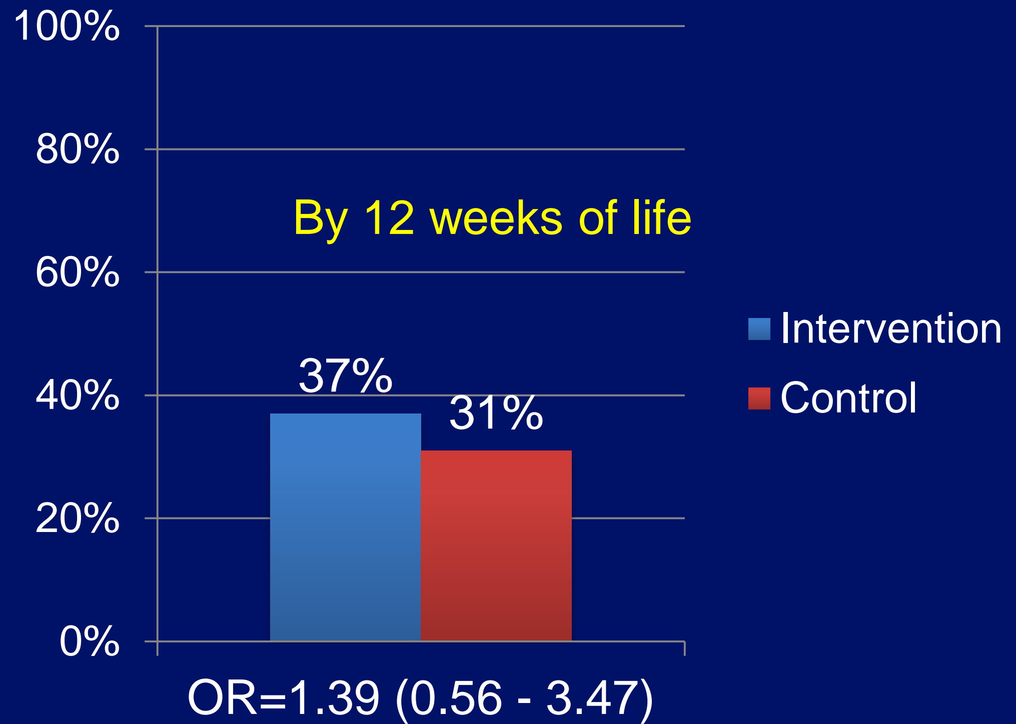
Be given ARVs

Enroll in HIV care and treatment

Adhere to ARVs during pregnancy^

Delivery in a health facility^

Infant HIV testing



By close of study (around 9 months of age):

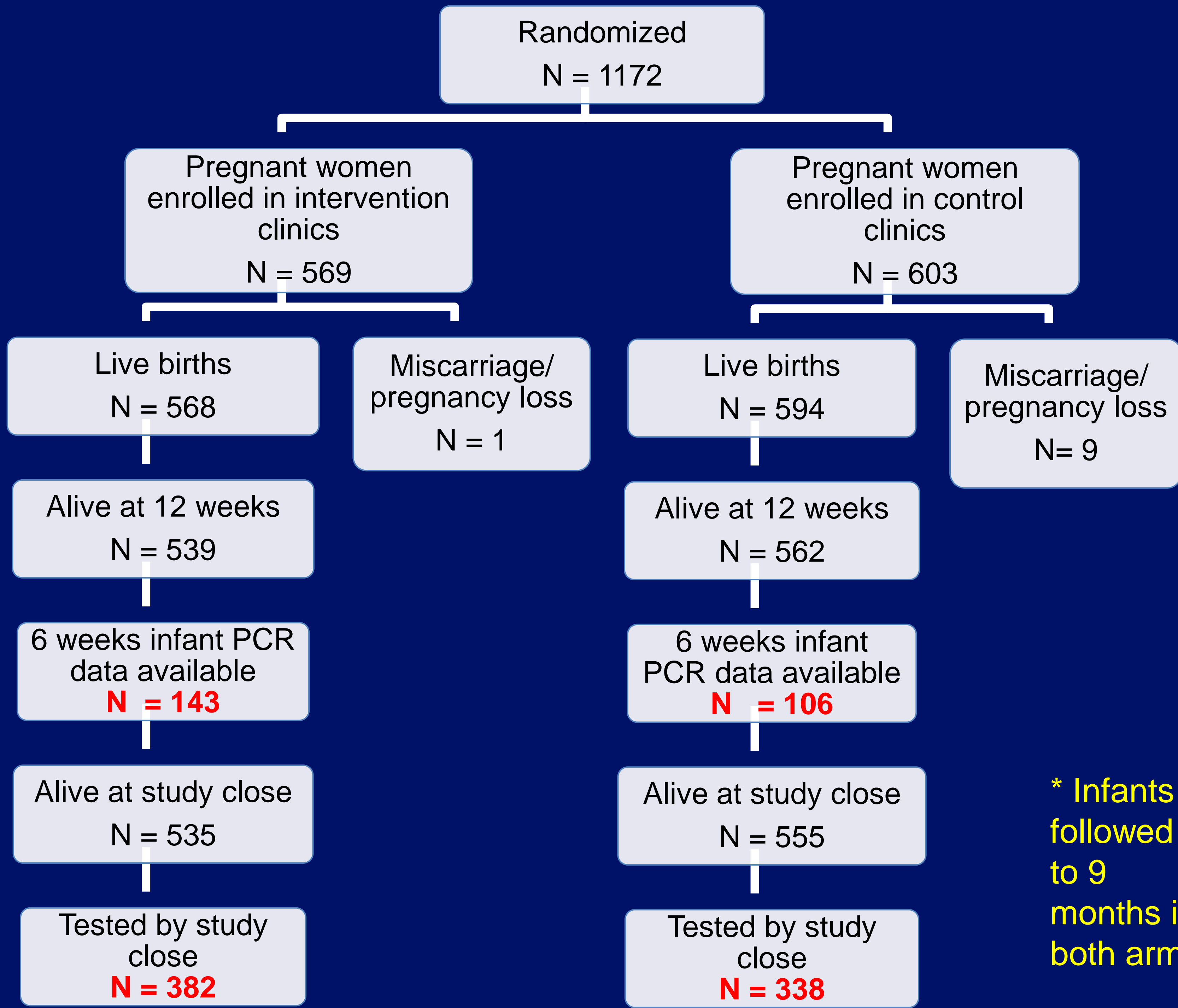
- Intervention: 67%
- Control: 56%
    - OR= 1.45 (0.74-2.87)

Conclusions

- Initial services received by pregnant women at ANC were similar in both study arms
- Results indicate strong positive effects of integration on:
    - women's timely enrollment in HIV care
    - Use of ARVs during pregnancy
- Trends toward positive effects on other PMTCT uptake outcomes, but not statistically significant
- Early infant diagnosis remained a challenge in both study arms

Effects on Maternal HAART Initiation and Maternal & Infant Outcomes

Sierra Washington, Starley B. Shade, Janet M. Turan, Elizabeth A. Bukusi, Maricianah Onono, Rachel L. Steinfeld, Marta Ackers, Craig R. Cohen

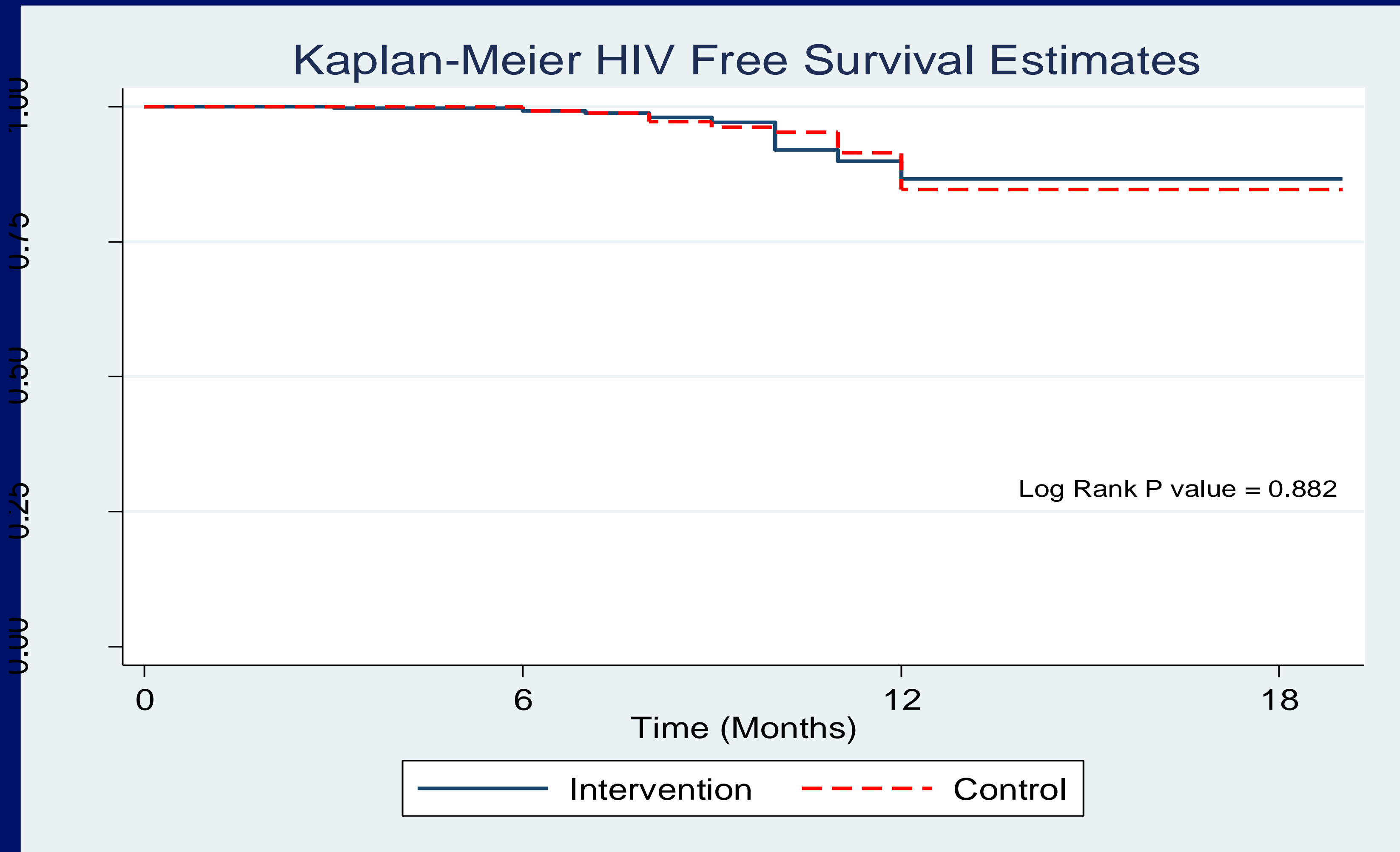

Randomized
N = 1172
Pregnant women enrolled in intervention clinics
N = 569
Pregnant women enrolled in control clinics
N = 603
Live births
N = 568
Miscarriage/ pregnancy loss
N = 1
Live births
N = 594
Miscarriage/ pregnancy loss
N= 9
Alive at 12 weeks
N = 539
Alive at 12 weeks
N = 562
6 weeks infant PCR data available
N = 143
6 weeks infant PCR data available
N = 106
Alive at study close
N = 535
Alive at study close
N = 555
Tested by study close
N = 382
Tested by study close
N = 338
* Infants followed to 9 months in both arms

Infant Outcomes

	Intervention N (%)	Control N (%)	Adjusted OR	95% CI
Total exposed infants (All live births)	568 (99.8)	594 (98.5)	10.76	(1.14-101.85)
Infant Exclusively breastfed^	70 (58)	69 (58)	1.10	(0.61-2.01)
HIV infected at 6 weeks PCR test	6 (4.2)	7 (6.6)	0.62	(0.20-1.90)
HIV infected by end study period (by 9 months)	28 (7.3)	27 (8.0)	0.89	(0.56-1.43)

^Self report from women with postpartum forms (n=325)

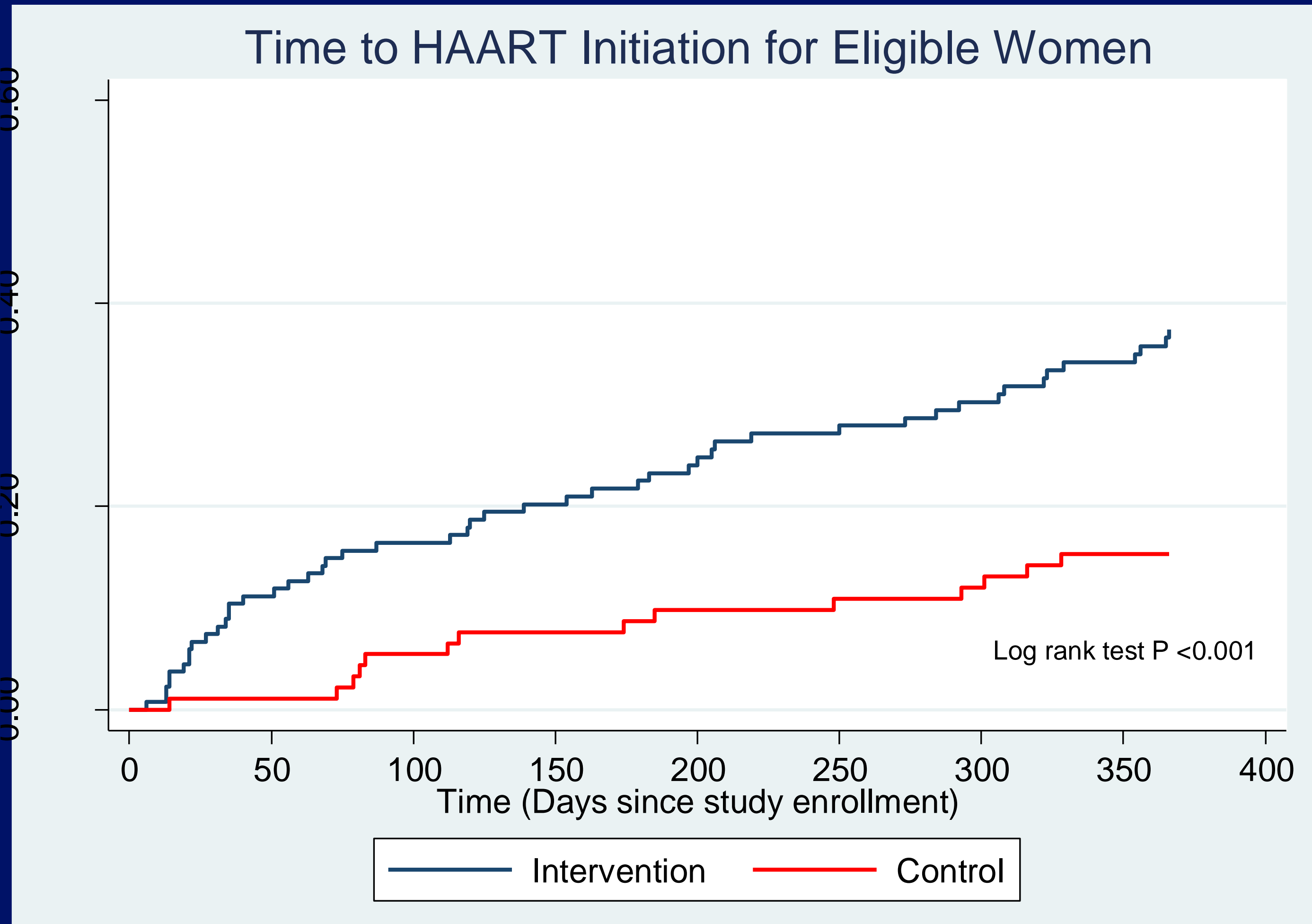
HIV free survival Amongst Exposed Infants



Maternal Outcomes

	Intervention N (%)	Control N (%)	Adjusted OR	95% CI
Composite clinical or immunologic progression to AIDS	10 (1.8)	7 (1.2)	1.38	0.45-4.25
Lost to Follow up (LTFU)	147 (25.8)	200 (33.2)	0.74	0.37-1.51
Maternal Death - N(%)	9 (1.6)	8 (1.5)	1.19	0.43-3.29
Composite LTFU or Death	156 (27.4)	208 (34.5)	0.76	0.40-1.44

Time to HAART Initiation Among Eligible Women



Median days to initiation of HAART (IQR):

- Intervention: 125 days (35-273)
- Control: 185 days (83-316)
  - HR=2.74 (1.56-4.80)

Conclusions

- Integration of HIV services into the ANC clinic was not associated with a reduced risk of MTCT.
- In the short term, there was no difference in maternal health outcomes in integrated clinics compared to standard clinics.
- However, integration of HIV services into the ANC clinic resulted in earlier initiation of HAART in eligible patients.