



Prevention of Mother to Child Transmission in a managed care setting in South Africa - no role for short term ART?

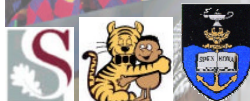


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Background

- Aid for AIDS (AfA) is a private sector disease management programme available to beneficiaries and employees of contracted medical funds and companies in Africa who are living with HIV/AIDS.
- Patients choose their own providers.
- No contractual agreement between AfA and providers.
- Commenced 1998, 2 million lives covered and >17,000 on long term ART



Elements of the AfA programme

- Encourage VCT of members
- ART for adults and children
- PEP
- PMTCT :
 - ARV to mother
 - ZDV to infant for 6 weeks
 - Formula feeding encouraged and funded
 - Caesarean section permitted

History of ARV use in MTCT in AfA

- 1998: ZDV 250mg bid from 34/40 (mono-therapy)
- 1999-2001: some mothers received ZDV+ 3TC from 34/40 (dual therapy)
- 2002 : HAART from 2nd trimester
 - Combivir® + NVP/PI
 - ZDV mono-therapy recommended with plasma viral load $< \log_{10} 3$ as low transmission rate expected in ARV naive women

Study Objectives

- Compare HIV transmission in mothers receiving – mono/dual/HAART
- Describe transmission rates
 - HAART: ≥ 1 month versus < 1 month
 - ZDV: with plasma viral load $< \log_{10} 4$ or CD4 > 500 ("low risk")



Methods

- Data from confidential AfA database
- Records were extracted for mothers who had received PMTCT
- Inclusion criteria:
 - (i) Single qualitative HIV PCR available for neonates at $\geq 6w$
 - (ii) women who were issued ARV confirmed by pharmacy refills.



Baseline Demographics

Viral load	Median
Mono	4.05
Dual	4.09
HAART	4.09

CD4 count	Median
Mono	400
Dual	375
HAART	500



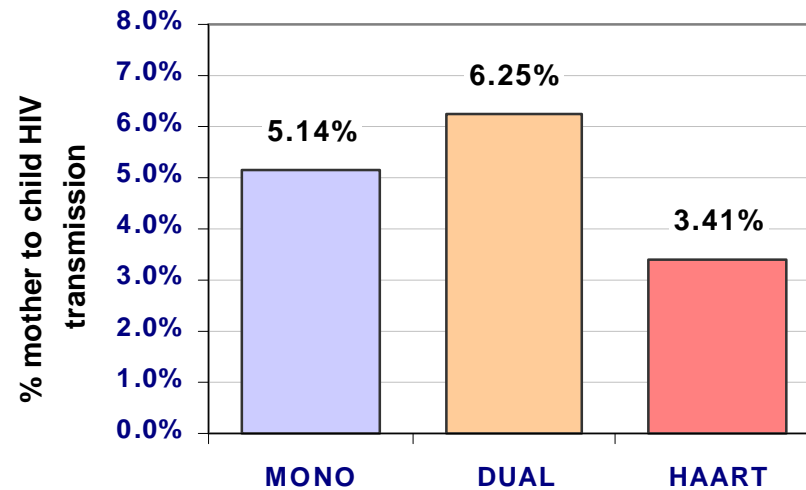
Results

Caesarian section rate

Therapy	C-Section rate
MONO	88%
DUAL	88%
HAART	95%



Transmission rate for mono therapy, dual therapy, HAART

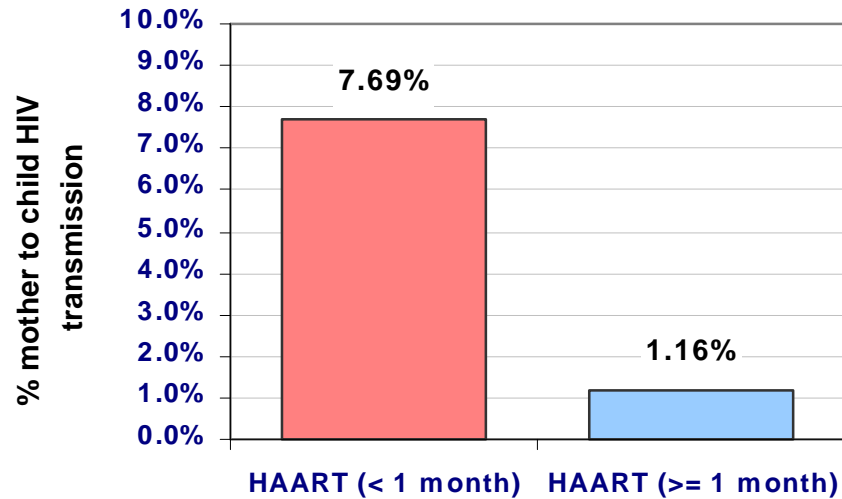


Therapy	Total	Negative	Positive	Percent
MONO	993	942	51	5.14%
DUAL	128	120	8	6.25%
HAART	264	255	9	3.41%
Total	1,385	1,317	68	4.91%

	P value	Significant	Odds ratio	95% CI
Mono vs Dual	0.532	NS	1.23	0.97 to 1.06
Mono vs HAART	0.329	NS	0.65	0.32 to 1.34



HAART: < one month versus ≥ one month



Therapy	Total	Negative	Positive	Percent
HAART (< 1 month)	91	84	7	7.69%
HAART (>= 1 month)	173	171	2	1.16%
Total	264	255	9	3.41%

	P value	Significant	Odds ratio	95% CI
HAART ≥ 1mth vs Mono	0.017	** S	0.22	0.05 to 0.90
HAART ≥ 1mth vs < 1mth	0.009	** S	0.14	0.03 to 0.69



ZDV - monotherapy in "low risk" settings

- 4.1% transmission rate with entry VL $\leq \log_{10} 4$
- 24% of transmitting mothers had CD4 > 500

Conclusion

- HAART for ≥ 1 month is more effective than HAART for <1 month, mono- or dual-therapy for PMTCT
- Transmission in “low risk” settings (plasma viral load $<\log_{10}4$ or CD4 >500) is still significant and HAART should be considered for all pregnant women.



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