

## Pre-post assessment of PMTCT in Kouga LSA

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*CDC/PEPFAR award: "Programme to Improve Capacity of an Indigenous Statutory Institution to Enhance M&E of HIV/AIDS in RSA"*

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# Presentation Overview

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- **Background**
- **Baseline assessment: Missed Opportunities in Kouga LSA**
- **Goals to address missed opportunities**
- **Interventions**
- **Methods**
- **Results**
- **Key improvements**
- **Key issues emerging**
- **Conclusion**

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# Background

UNAIDS, 2005/2008:

- 38 000 children in South Africa acquired HIV infection at birth
- 26 000 children infected with HIV through breastfeeding
- Globally only 9% of HIV pregnant women were receiving ARVs
- By December 2005, PMTCT program had been implemented in 77% of SA public health facilities
- Large portion of pregnant women still do not receive an HIV test during pregnancy
- <50% of pregnant women known to be HIV+ receive NVP at the time of delivery.
- Need for improved coverage and PMTCT strengthening

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# National Strategic Plan on HIV & AIDS and STIs: 2007 – 2011

(DoH, 2007)

Priority area 1: Reduce HIV incidence rate  
by 50% by 2011



- Goal 1:** Reduce vulnerability to HIV infection & the impact of AIDS
- Goal 2:** Reduce sexual transmission of HIV
- Goal 3:** Reduce mother-to-child transmission of HIV
- Goal 4:** Minimise the risk of HIV transmission through blood and blood products

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## Baseline Assessment: Missed Opportunities in Kouga LSA

Rispel, L.C., Peltzer, K., Phaswana-Mafuya, N., Metcalf, C.A., & Treger, L. 2009. Assessing missed opportunities for PMTCT in the Kouga LSA, EC. SAMJ, 99 (3): 174-179

1. 74% were offered HIV Counseling & Testing
2. Only 43% had been tested for HIV at pregnancy
3. Only 40% were aware of PMTCT program
4. Only 19% had been given NVP at 28 weeks
5. Only 53% received FP Counseling
6. 27% incorrectly believed that an HIV+ woman would always infect her baby
7. Discrepancies between DHIS and clinic records

## Goals to address missed opportunities in Kouga LSA

- Strengthening PMTCT in existing sites in Kouga LSA
- Training health workers in PMTCT/VCT
- Increase # of pregnant women who receive confidential HIV counseling and testing (CT) and receive their results
- Increase # of pregnant women provided with a complete course of NVP
- Monitor # of children who become infected with HIV during the first year of life
- Increase # of eligible women of childbearing age enrolled in wellness programs and/or treatment programs
- Strengthening M&E System

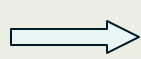
# Interventions

**GOAL:** Strengthen programmes to prevent HIV transmission from mother to child in Kouga LSA of the Eastern Cape Province

## Objectives

**Outputs**  
Number of

- PMTCT service sites
- health workers trained on PMTCT provision
- pregnant women who received CT and result;
- ARV prophylaxis; CD4 test or referred to a wellness and/or an ART programme
- women eligible for HAART referred and enrolled into a treatment program
- infants who receive NVP; tested for HIV by PCR at 6 to 14 weeks; and at 12 months 18 months and referred



Phase 1

## BASELINE ASSESSMENT

### Formal Health Sector

- Key informants interviews and observation
- Client interviews

### Traditional Health Sector

- Traditional health practitioners
- Determine KAP and training needs
- THP clients

### Community

- Interviews with NGOs active in the field of HIV and AIDS
- Focus groups with HIV+ women who delivered

Phase 2

## INTERVENTIONS

## INTERVENTIONS

- Health worker training: THPs, lay counsellors, nurses, health promoters, etc
- Provision of guidelines, policies and development of operational plans
- Establishment of support groups
- Appointment of staff to fill vacant positions
- Technical support to increase provision of ARV prophylaxis

Phase 3

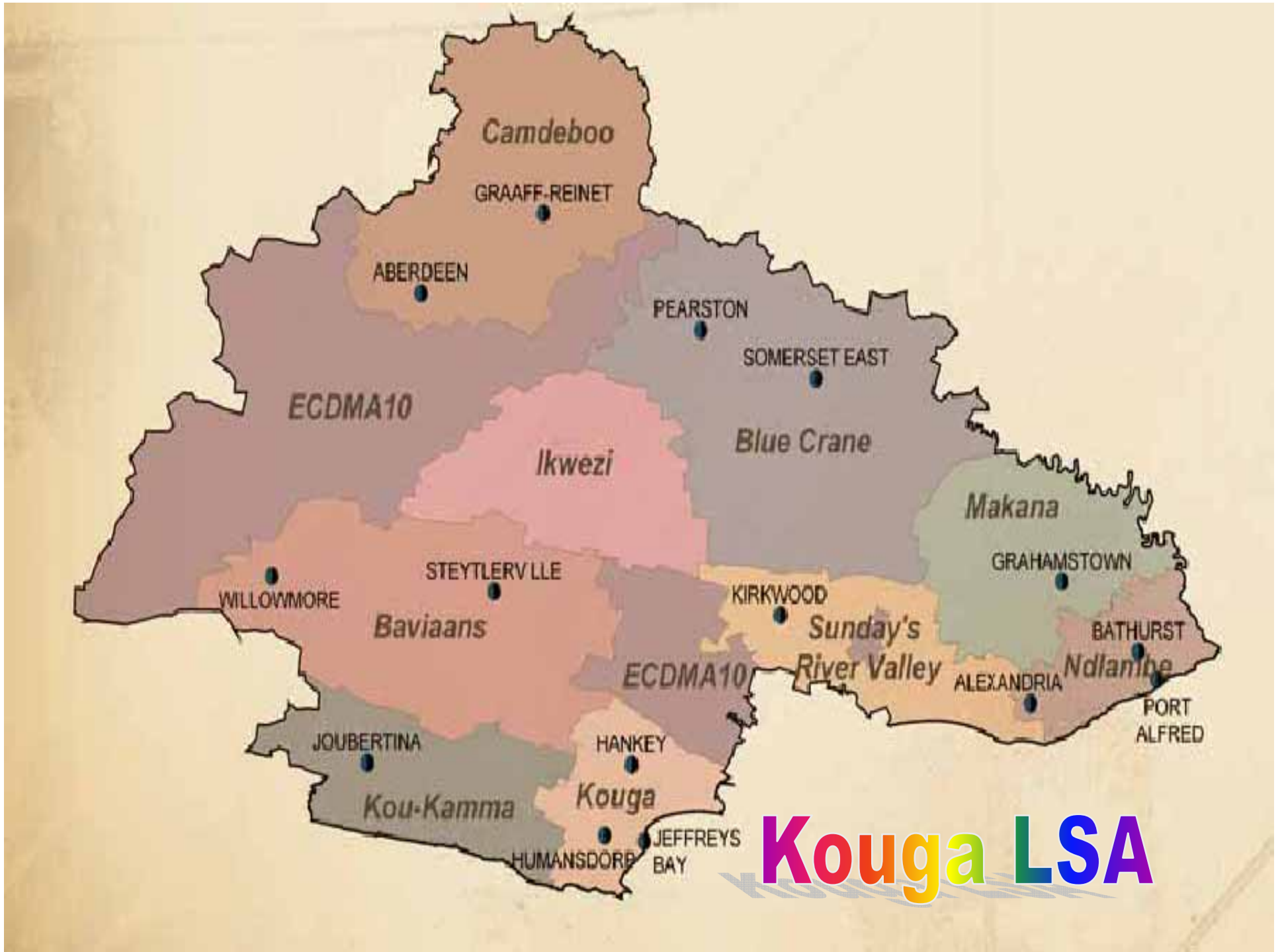
**M & E – Post intervention assessment in the formal health sector**

## Methods

- This paper focuses on PMTCT pre-post assessment in as far as formal sector is concerned (interviews with clinic managers and PMTCT clients – ANCs/PNCs)
- Pre-post results for Lay counsellors, support group members and traditional healers are not included
- A pre-post design was used employing structured questionnaires for:
- Health service assessment:
  - pre - 20 clinics/post -22 clinics
  - PMTCT programme coordinator or clinic manager at each PMTCT site was interviewed
- Exit interviews had purposive samples:
  - pre - 296 ANCs/ post - 239 ANCs;
  - pre – 70 HIV+ PNCs; post – 142 HIV+ PNCs







# Kougga LSA

# Clinic assessment

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**PREVENTION OF  
MOTHER TO CHILD TRANSMISSION  
OF HIV (PMTCT)**  
SAVING THE UNBORN BABY,  
CARING FOR THE MOTHER



**BENEFITS**

- FREE COUNSELING
- FREE TESTING FOR HIV
- MEDICINES
- SAFE DELIVERY PRACTICES
- DIFFERENT FEEDING OPTIONS FOR BABY
- SUPPORT GROUP

FOR MORE INFORMATION CONTACT YOUR LOCAL HEALTH FACILITY OR PHONE: 048 509 3937

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Information sheet 1

Information sheet 2

Information sheet 3

**Improvements in compliance to national PMTCT criteria were observed: n=20/n=22**

	Pre test %	Post test %
On-site counseling for HIV testing	18(100)	22(100)
On-site HIV testing	17(94)	22(100)
Private room in which VCT can be conducted	17(94)	14(64)
Daily availability of VCT	16(89)	22(100)
Referral to an ART site	18(100)	22(100)
CD4 count testing	17(94)	22(100)
NVP given to HIV+ pregnant women at 28 weeks	17(94)	22(100)
NVP given to neonates within 72 hours of birth	5(28)	2(9)
Antenatal counseling on infant feeding	15(83)	22(100)
Postnatal counseling and support for infant feeding	15(89)	22(100)
Adequate supply of free infant formula	10(63)	20 (91)
PCR testing for infants for HIV infection	13(72)	22(100)
2 health workers trained in PMTCT per facility	7(41)	15(68)
A support group specific to HIV+ and pregnant women	6(35)	15(68)

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# Client perspectives: ANCs

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## No significant changes were observed in access to health care facility

Transport mode	Pre N (%) (n=296)	Post N (%) (n=239)
Walking	256 (86.6)	222 (92.9)
Taxi	23 (7.8)	11 (4.6)
Friend/family member's transport	16 (5.4)	4 (1.7)
<b>Time to clinic</b>		
< ½ hour	260 (87.8)	202 (84.5)
½ to 1 hour	29 (9.8)	31 (13)
> 1 hour	7 (2.4)	6 (2.5)
In labour during the day	292 (98.6)	231 (96.6)
In labour at night	285 (96.3)	232 (97.1)
Would use ambulance during the day to health care facility	271 (91.6)	202 (84.5)
Would use ambulance at night to health care facility	257 (86.8)	197 (82.4)
About 1 hour to get to health care facility during the day	168 (56.7)	118 (49.5)
About 1 hour to get to health care facility during the night	160 (54.2)	110 (46)

**Significant decline in the proportion of women who were delivered by a doctor**

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	<b>Pre: N (%)</b> (n=296)	<b>Post: N (%)</b> (n=239)
<b>Items</b>	<b>N (%)</b>	<b>N (%)</b>
<b>Place of delivery</b>		
<b>Hospital</b>	<b>170 (93.4)</b>	<b>135 (90.6)</b>
<b>At home</b>	<b>12 (6.6)</b>	<b>14 (9.4)</b>
<b>Person who delivered previous baby</b>		
<b>Doctor</b>	<b>70 (38.3)</b>	<b>35 (23.6)*</b>
<b>Midwife</b>	<b>89 (48.6)</b>	<b>102 (69.4)</b>
<b>TBA</b>	<b>3 (1.6)</b>	<b>2 (1.4)</b>
<b>Family member</b>	<b>3 (1.6)</b>	<b>6 (4.1)</b>
<b>Other</b>	<b>18 (9.8)</b>	<b>2 (1.4)</b>
<b>Intention to give birth at hospital/clinic</b>	<b>291 (98.3)</b>	<b>235 (99.2)</b>

\*p<0.005

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**Significant increase in # of women who were tested for HIV during the previous pregnancy, who knew HIV test results and HIV counseling <30 min**

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	Pre: N (%) (n=296)	Post: N (%) (n=239)
<b>HIV testing during last pregnancy</b>	<b>N (%)</b>	<b>N (%)</b>
<i>Tested for HIV during last pregnancy</i>	<b>79 (27.0)</b>	<b>98 (66.7)*</b>
<i>Knew the results of HIV test during last pregnancy</i>	<b>79 (27.0)</b>	<b>98 (66.7)*</b>
<b>How long did the nurse (or other staff) talk to you during the HIV counseling?</b>		
<i>&lt;1/2 hour</i>	<b>174(58.7)</b>	<b>71 (33.4)*</b>
<i>1/2 - 1 hour</i>	<b>20(13.4)</b>	<b>135 (63.4)</b>
<i>1-2 hours</i>	<b>6(2.0)</b>	<b>4 (1.9)</b>
<i>&gt; 2 hours</i>	<b>1(0.3)</b>	<b>3 (1.4)</b>
<b>Offered HIV counseling upon arrival</b>	<b>217 (73.6)</b>	<b>227 (95.4)</b>

\* p<0.000

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**Significant differences were observed regarding educating the community about available health services and HIV/AIDS counselling and reducing waiting time**

Social Aspect of HIV/AIDS and Health

	Pre N (%)	Post N (%)
<b>Spent less than one hour for an ANC visit</b>	<b>(n=296)</b>	<b>(n=239)</b>
<b>The amount of time spent was reasonable</b>	<b>186 (62.8)</b>	<b>123 (51.5)</b>
<b>Would come back to this facility for care</b>	<b>294 (99.3)</b>	<b>222 (92.9)</b>
<b>The reasons why they would come back to facility were:</b>		
<b>No alternative facility</b>	<b>156 (52.6)</b>	<b>39 (16.4)</b>
<b>The nursing staff are friendly and kind</b>	<b>106 (35.8)</b>	<b>27 (11.3)</b>
<b>Increase number of staff including doctors, nurses and counselors</b>	<b>95 (33.2)</b>	<b>57 (23.8)</b>
<b>Educate community about the available health services and HIV/AIDS counseling</b>	<b>35 (12.2)</b>	<b>2 (0.8)*</b>
<b>Increase number of ambulances available</b>	<b>19 (6.6)</b>	<b>8 (3.2)</b>
<b>Extension of service hours at the clinic</b>	<b>13 (4.5)</b>	<b>0</b>
<b>Reduce waiting time</b>	<b>13 (4.5)</b>	<b>33 (13.8)*</b>
<b>Extension of the clinic/ hospital buildings</b>	<b>7 (2.4)</b>	<b>8 (3.2)</b>
<b>Improve privacy</b>	<b>4 (1.4)</b>	<b>3 (.0)</b>

p<0.001

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# Client perspectives: PNCs

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## Significant increase in # number of women who were aware of the PMTCT programme at post assessment

	Pre N (%) (n = 70)	Post N (%) (n = 142)
Have you heard about the PMTCT program?	28 (40.0)	112 (77.8)*
<b>If so, where did you hear about it?</b>		
<i>At the clinic</i>	24 (34.3)	111 (92.5)
<i>At the hospital</i>	1 (1.4)	6 (5.0)
Other (Radio/community)		3 (2.5)
Can an HIV-positive mother infect her baby with HIV during pregnancy?	37(54.4)	153(69.9)
Can an HIV-positive mother infect her baby with HIV during delivery?	43(63.2)	159(72.6)

\*p<0.001

**Significantly more women felt relaxed about pre-test  
counselling at post assessment**

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	Pre N (%) (n = 70)	Post N (%) (n = 142)
<b>Experience/Feelings about HIV pre-test counseling</b>		
<i>Nervous</i>	41 (58.6)	67 (49.3)
<i>Relaxed</i>	21 (30.0)	65 (47.8)*
<i>Never received HIV pre-test counseling</i>	8 (11.4)	4 (2.9)
<b>Experience/Feelings about HIV post-test counseling</b>		
<i>Miserable</i>	29 (41.4)	34 (26.8)
<i>Confident/good</i>	23 (32.8)	54 (42.5)
<i>Did not want to accept the result</i>	5 (7.4)	2 (1.5)
<i>Accepted the situation with little panic</i>	7 (10.0)	5 (3.9)
<i>Never received post-test counseling</i>	6 (8.5)	17 (13.4)

**\*p=0.001**

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**The proportion of women who disclosed their status to someone did not seem to improve**

	<b>Pre N (%) (n = 70)</b>	<b>Post: N (%) (n = 142)</b>
<b>Had disclosed their HIV-test result to someone</b>	<b>63 (92.6)</b>	<b>118 (84.3)</b>
<b>Person who they had disclosed to:</b>		
<b>Partner/Husband</b>	<b>32 (50.8)</b>	<b>77 (30.9)</b>
<b>Mother</b>	<b>11 (17.5)</b>	<b>43 (17.3)</b>
<b>Sister</b>	<b>5 (7.9)</b>	<b>40 (16.1)</b>
<b>Other family members</b>	<b>5 (7.9)</b>	<b>51 (20.5)</b>
<b>Friends</b>	<b>6 (9.5)</b>	<b>26 (10.4)</b>
<b>Other (specify)</b>	<b>4 (6.3)</b>	<b>4 (1.6)</b>
<b>Experience following disclosure</b>		
<b>Relieved</b>	<b>47 (67.1)</b>	<b>68 (62.9)</b>
<b>Devastated</b>	<b>12 (17.1)</b>	<b>30 (27.7)</b>
<b>Nothing</b>	<b>5 (7.1)</b>	<b>4 (3.7)</b>
<b>Had not disclosed their HIV status to anybody</b>	<b>6 (8.5)</b>	<b>6 (5.5)</b>

**A health facility was the preferred place of delivery. Most deliveries were done by nurses but significant differences were not observed**

	Pre N (%) (n = 70)	Post N (%) (n = 142)
<b>Place of delivery</b>		
<i>Home or another person's home</i>	1 (1.4)	10 (7.1)
<i>Health facility</i>	66 (94.3)	131 (92.9)
<i>Other</i>	3 (4.3)	0 (0.0)
<b>Person who assisted with the delivery of baby</b>		
<i>Doctor</i>	14 (20.3)	33 (23.4)
<i>Nurse/midwife</i>	54 (78.3)	95 (67.4)
<i>Other</i>	1 (1.4)	13 (9.2)

## No significant differences were observed on NVP intake

Items	N (%) (n = 70)	N (%) (n = 142)
Whether provided with a drug to prevent mother to child transmission of HIV	60 (88.2)	125 (89.3)
Whether partner/husband informed that drug must be taken	41 (66.1)	96 (74.4)
When did you take (or were given) the drug?	N (%)	N (%)
<i>Before labour began</i>	50 (82.0)	97 (77.0)
<i>Onset of labour</i>	10 (16.4)	25 (19.8)
<i>When baby was born</i>	1 (1.6)	3 (2.4)
Did this baby receive a syrup medicine within 3 days after s/he was born to prevent mother to child transmission?	51 (77.3)	127 (90.7)



## No significant differences observed on infant feeding

Whether infant feeding options given during counseling	N (%)	N (%)
	(n = 70)	(n = 142)
<i>No, not offered</i>	9 (12.8)	6 (4.8)
<i>Yes, Formula exclusively</i>	18 (25.7)	
<i>Yes, Breastfeeding exclusively</i>	41 (58.6)	
<i>Yes, cup feeding only</i>	2 (2.6)	
<b>Reported feeding option practiced</b>	<b>N(%)</b>	
<i>Exclusive breastfeeding</i>	15 (21.4)	20 (14.3)
<i>Exclusive formula feed (bottle with nipple)</i>	57 (82.6)	120 (85.7)
<i>Mixed feeding (breast feeding &amp; plain water or other liquids or solid or mushy food)?</i>	1 (1.5)	7(5)

## Awareness of of VCT before coming increased significantly

	<b>Pre N (%)</b>	<b>Post N (%)</b>
	<b>(n = 70)</b>	<b>(n = 142)</b>
<b>Aware of VCT before coming to clinic</b>	<b>186 (63.1)</b>	<b>174 (72.8)*</b>
<b>Offered HIV counseling at clinic</b>	<b>217 (73.6)</b>	
<b>Prenatal visit time in minutes [M, SD]</b>	<b>Not asked</b>	<b>149 (101)</b>
<b>HIV counseling time in minutes [M, SD]</b>	<b>Not asked</b>	<b>32 (24)</b>
<b>Was the counseling time enough</b>		
<b>-too much</b>	<b>98 (33.1)</b>	<b>123 (51.7)</b>
<b>-just enough</b>	<b>186 (62.8)</b>	<b>103 (43.3)</b>
<b>-too short</b>	<b>12 (4.1)</b>	<b>12 (5.0)</b>

## Key Improvements

- Clinics' compliance to national PMTCT criteria
- Delivery and counseling experiences improved
- Increase in # of women tested for HIV in previous pregnancy
- Increase in # of women who knew HIV test results
- Improved awareness of PMTCT/VCT and HIV/AIDS services

## Key issues emerging

- Access to health care (mode of transport, time to clinic)
- Disclosure (spouse, relative, friend)
- Waiting time to be reduced
- Infant feeding Practices
- NVP given to pregnant women at onset of labour and within 3 days of birth
- Counselling time

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# Conclusion

- After approximately 12 months of PMTCT strengthening activities in Kouga LSA, our results demonstrate the feasibility of implementing PMTCT interventions in a rural and relatively remote setting in South Africa.
- More research is needed to address key emerging issues
- The lessons learnt from strengthening PMTCT programme may contribute to the design of the national expansion strategy for PMTCT in South Africa and elsewhere.

# Learning from the EC: Environmental friendly transport.....little pollution

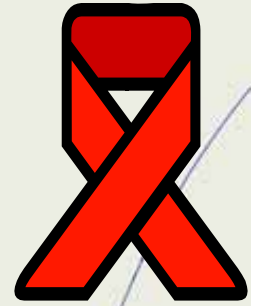
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