



Programme to Improve Implementation of the Prevention of Mother to Child Transmission of HIV in Gert Sibande District in Mpumalanga, South Africa: baseline assessment (preliminary report 23 March 2009)

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Introduction

ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral
CDC	United States Centers for Disease Control and Prevention
CHC	Community Health Centre
CD4	Cell Differentiation
CT	Counselling and testing
DHIS	District Health Information System

HSRC RESEARCH OUTPUTS
5832

FANRPAN	Food, Agriculture and Natural Resources Policy Analysis Network
FP	Family planning
HIV	Human immunodeficiency virus
HSRC	Human Sciences Research Council of South Africa
IMCI	Integrated Management of Childhood Illnesses
LSA	Local Service Area
MCH	Maternal and child health
MTCT	Mother-to-child transmission of HIV
NVP	Nevirapine
PCR	Polymerase chain reaction
PEPFAR	(United States) President's Emergency Plan for AIDS Relief
PLWHA	Person living with HIV and AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
PN	Professional Nurse
PNC	Postnatal care
SAHA	Social Aspects of HIV/AIDS and Health Research Programme
SPSS	Statistical Package for Social Services
VCT	Voluntary counselling and testing
UNAIDS	Joint United Nations Programme on AIDS
WHO	World Health Organisation

1. INTRODUCTION

1.1 Context, background and literature review

The HIV and AIDS pandemic remains one of the most serious development crises in the world (WHO, 2006). Women and children bear a disproportionate share of the burden, and in many settings continue to experience high rates of new HIV infections and of HIV-related illness and death. In 2005 alone, an estimated 540 000 children were newly infected with HIV, with about 90% of these infections occurring in sub-Saharan Africa (UNAIDS, 2006).

Mother-to-child transmission (MTCT) can occur during pregnancy, labour and delivery or during breastfeeding (WHO, 2006) and in the absence of any intervention the risk of such transmission is 15–30% in non-breastfeeding populations, with breastfeeding by an infected mother increasing the risk to a total of 20–45% (de Cock, 2000). The risk of MTCT can be reduced to under 2% by a range of interventions that include antiretroviral (ARV) prophylaxis given to women during pregnancy and labour and to the infant in the first weeks of life, obstetrical interventions including elective caesarean delivery (prior to the onset of labour and rupture of membranes), and complete avoidance of breastfeeding (UNAIDS, 2006).

In high income countries, these interventions have led to new HIV infections in children becoming increasingly rare. In many resource-constrained settings, however, elective caesarean delivery is seldom feasible and it is often neither acceptable nor safe for mothers to refrain from breastfeeding. In these settings, the efforts to prevent HIV infection in infants initially focused on reducing MTCT around the time of labour and delivery, which accounts for one to two thirds of overall transmission, depending on whether

the mother breastfeeds. Infant feeding patterns are a very important determinant of MTCT. For mothers using replacement feeding there is obviously no transmission through breastfeeding. De Cock et al suggest breastfeeding through 6 months leads to about 10% extra transmission (from 20% to 30%), while breastfeeding through 18-24 months leads to about 17.5% extra transmission (from 20% to 37.5%), compared to no breastfeeding (de Cock et al). Current international guidelines in PMTCT programmes suggest that breastfeeding be as short as possible for around 6 months (UNAIDS, 2005). However, a recent study by Coovadia et al. (2007) to assess the HIV-1 transmission risks and survival associated with exclusive breastfeeding and other types of infant feeding, found that exclusive breastfeeding carries a significantly lower risk of HIV transmission than do all types of mixed breastfeeding (Coovadia et al., 2007). The estimated risk of postnatal transmission of HIV by 20-26 weeks of age in exclusively breastfed infants who were negative at 6 weeks of age was 4.04% (Coovadia et al., 2007). This risk is lower than that in babies who receive other food or liquids in addition to breast milk before 6 months of age. Mixed feeding before or after 14 weeks nearly doubled transmission risk and the addition of solids increased the risk 11-fold (Coovadia et al., 2007).

The last few years have seen considerable efforts to introduce and expand PMTCT programmes. However, these interventions rely heavily on functioning maternal and child health services (FHI, 2003). Despite feasibility and cost-effectiveness of PMTCT, implementation and expansion in resource-constrained settings remains sub-optimal. By 2005, only 9% of HIV pregnant women were receiving ARV prophylaxis for HIV, with a striking variation in coverage between countries (UNAIDS, 2006).

In South Africa in 2006, an estimated 38 000 children acquired HIV infection from their mother around the time of birth, and an additional 26 000 children were infected with HIV through breastfeeding (DOH, 2007). Current national government policy for prevention of mother-to-child transmission (PMTCT) includes HIV testing during pregnancy, and the provision of nevirapine to pregnant women during labour and to their infants within 48 hours of delivery (DOH, 2004). A 2002 evaluation of 18 PMTCT pilot sites in all provinces found an HIV prevalence of 30% among women tested, 85% of tested women received their results, but only 55% of HIV-positive women attending the pilot facilities received nevirapine prophylaxis (Doherty et al. 2005).

By March 2005, the South African government PMTCT program had been implemented in 87% of public health facilities but a large portion of pregnant women still do not receive an HIV test during pregnancy, and less than 50% of pregnant women known to be HIV-positive receive nevirapine at the time of delivery (DOH, 2006). Implementation of the PMTCT program remains a challenge, especially in poor, rural areas. The national Department of Health indicated that human resource issues remain a key challenge, together with sustainable drug procurement, transport and inter-departmental collaboration (DOH, 2004). In many areas, record-keeping systems are inadequate to enable the follow-up of HIV-infected pregnant women, serving as an additional barrier to PMTCT program implementation (DOH, 2004).

In the rural Eastern Cape Province, several studies by the Human Sciences Research Council, have investigated barriers to utilization of PMTCT and mechanisms for improving access (Peltzer et al. 2005, Peltzer et al. 2007, Skinner et al., 2005). These studies have shown that the socio-economic context presents a formidable barrier to the provision of PMTCT services, and that poor roads, an under-developed transport system and poor telecommunications present significant obstacles to access, even if free health care services are made available. This is exacerbated by understaffed and under-developed health care facilities. Several supportive interventions have been introduced, which include ready made Nevirapine packs (this enables the pregnant women to administer the adult and infant Nevirapine dosages themselves), staff training, traditional birth attendant evaluation, training and supportive activities and some infrastructural interventions.

Globally, renewed efforts are required urgently to increase access to comprehensive, integrated programmes to prevent HIV infection in infants and young children. These programmes also serve as a unique entry point for women to access the services they need to improve their own health and to prevent transmission of HIV to their infants (WHO, 2003). Several recent initiatives have presented an opportunity for countries to increase the coverage and effectiveness of PMTCT programmes. These include: the Group of Eight Nations' July 2005 declaration of commitment on HIV/AIDS; re-affirmation by WHO Member States in September 2005 to implement all goals in the 2001 UNGASS Declaration of Commitment; and the Abuja declaration, where a Call to Action Towards an HIV-free and AIDS-free Generation was issued by representatives of governments, multilateral agencies, development partners, research institutions, civil society and people living with HIV (UNGASS, 2001).

1.2 The study setting

Mpumalanga has a population of 3,643,435, in Ehlanzeni district 1,526,236, in Gert Sibande 890,699 and Nkangala district 1,226,500. Mpumalanga is ranked the 3rd most rural province in South Africa, with 60.9% of its total population living in rural areas, and 86.7% of households have access to water.

It is estimated that 90% of the population is dependent on the state for the provision of all their health services (Department of Health & Social Services, 2008). The primary health care utilisation rate of 2 visits per person per year has been constant from 2003 to 2006. The nurse clinic workload is currently 46.7 patients per day, which is 50% higher than the South African average. HIV counselling and testing uptake in Mpumalanga province is about 70%, while in Gert Sibande District it is below 50%. To prevent HIV transmission to their babies, 52% of mothers identified as positive, took Nevirapine in 2006. The delivery rate in health facilities fluctuated around 70% and the current rate of 67.9% for 2005 is well below the South African average (Health Systems Trust, 2006).

Figure 1: Map showing location of the Mpumalanga Province (in blue study district: Gert Sibande)



1.2.1 HIV prevalence in Mpumalanga

The antenatal HIV prevalence in Mpumalanga province was estimated to be 32.1% in 2006 and 34.8% HIV prevalence observed in 2005. Among the three districts in the province, Gert Sibande district had the highest antenatal HIV prevalence (38.9%) in 2006 (Department of Health, 2007).

1.3 Rationale for the intervention

The HSRC proposes to work with the Mpumalanga Department of Health and Social Development to provide technical support and strengthen PMTCT service implementation at all PMTCT sites in Gert Sibande District of Mpumalanga Province.

The HSRC, together with its CDC partners, proposes to assist the Government of Mpumalanga province to maximize the knowledge gained so far in implementation of previous interventions programmes to increase the participation of women in the PMTCT programme and to increase its effectiveness. The study will complement the existing national programme on the prevention of mother-to-child transmission of HIV, and heed the international call to make women and children a priority in the fight against the epidemic.

In partnership with the Mpumalanga Department of Health and Social Services, the purpose of the intervention is to provide technical support and strengthen PMTCT service implementation at all PMTCT sites in Gert Sibande district.

2. PMTCT GOALS AND OBJECTIVES

The goal of the PMTCT component is to strengthen programmes to prevent HIV transmission from mother to child in Gert Sibande District in Mpumalanga.

The objectives are to:

1. Expand the PMTCT programme support to a total of existing 30 PMTCT sites in Gert Sibande District.
2. Train health workers (including community and lay health workers) in PMTCT, in accordance with South African national standards and guidelines;
3. Increase the number of pregnant women who receive confidential HIV counselling and testing (CT) and who receive their results;
4. Increase the number of pregnant women provided with a complete course of antiretroviral therapy in a PMTCT setting;
5. Monitor the number of children in Gert Sibande district in Mpumalanga who become infected with HIV during the first year of life;
6. Increase the number of eligible women of childbearing age enrolled in wellness and/or treatment programmes;
7. Increase the number of babies born to HIV-positive women who are tested for HIV by PCR at 6 weeks to 6 months;
8. Increase the number of babies born to HIV-positive women who are tested for HIV antibodies at 12 to 24 months;
9. Increase the number of infants born to HIV-positive women receiving infant formula;
10. Increase the number of infants born to HIV-positive women exclusively breast fed.

3. PMTCT PROGRAMME OUTPUTS

1. Number of health workers trained in the provision of PMTCT services according to South African guidelines and standards.
2. Number of pregnant women who receive CT for PMTCT and who receive their HIV test result;
3. Number of pregnant women who receive ARV prophylaxis in a PMTCT setting;
4. Number of infants tested for HIV by PCR at 6 weeks to 6 months;
5. Number of pregnant women referred to a wellness and/or an ART programme;

4. METHODS

This approach to PMTCT programme strengthening will have the following components:

- (a) A baseline and post intervention rapid assessment in the formal health sector;
- (b) Interventions to strengthen PMTCT programme implementation
- (c) Monitoring and evaluation support.

4.1 A baseline intervention rapid assessment in the formal health sector

Strengthening PMTCT programme implementation requires understanding of the quality and scope of existing services, as well as the behavioural and socio-cultural context of implementation. The purpose of the rapid baseline assessment is to gather in-depth information on the current situation and dynamics regarding PMTCT implementation in the formal health sector, and to inform the planned/proposed interventions. The measures used at the rapid baseline assessment will be repeated after two years as a post intervention assessment and to measure the impact of the programme.

A) Interviews with PMTCT clinic managers and record review

Sampling and procedures

Existing PMTCT sites (n=72) in seven sub-districts (Albert Luthuli, and Pixley Ka Seme) in Mpumalanga were included in the baseline intervention assessment of the formal health sector. Assessments included two components:

HPP (N=1)	1	1	0	1	1	1	1	1	1	1	1	1	1
LC (N=16)	13	14	10	0	1	1	0	0	1	0	0	0	2
NA (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0
PHC Manager (N=1)	1	1	1	0	1	1	0	0	0	0	0	0	1
PN (N=43)	20	26	12	0	9	7	12	11	2	3	12	0	12
RN (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0
SPN (N=2)	1	2	1	1	1	1	1	0	1	1	1	1	1

Table 2: Pixley ka Seme municipality (N=38) training completed

Staff Job title	VCT	PMTC	Revised PMTCT guidelines	M-to-M	ARV (for PMTCT)	Infant feeding (for PMTCT)	Family planning	Well baby	Home based care	ART adherence counselling	Dual therapy
CPN (N=1)	0	0	0	0	0	0	0	0	0	0	0
ENA (N=10)	3	2	1	0	0	0	0	0	0	2	0
GNA (N=7)	0	0	0	0	0	0	0	0	0	0	0
LC (N=8)	8	3	1	0	0	0	0	0	0	1	0
PN (N=11)	4	5	3	0	3	4	3	6	0	1	0
SPN (N=1)	0	1	1	0	1	0	0	0	0	0	0

2.2 Training needs

Table 3: Albert Luthuli municipality (N = 78) training needs

Staff Job title	VCT	PMTC	Revised PMTCT guidelines	M-to-M	ARV (for PMTCT)	Infant feeding (for PMTCT)	Family planning	Well baby	Home based care	ART adherence counselling	Dual therapy
AN (N=1)	1	1	1	1	1	1	1	1	1	1	1
CPN (N=2)	1	1	1	2	1	1	1	1	2	2	1
ENA (N=5)	3	5	4	5	5	5	4	5	5	3	5
GNA (N=5)	5	5	5	5	5	5	5	5	5	5	5
HPP (N=1)	0	0	1	0	0	0	0	0	0	0	0
LC (N=16)	3	2	6	16	16	15	16	16	15	16	14
NA (N=1)	1	1	1	1	1	1	1	1	1	1	1
PHC Manager (N=1)	0	0	0	1	0	0	1	1	1	1	0
PN (N=43)	23	17	31	43	34	36	31	32	41	40	31
RN (N=1)	1	1	1	1	1	1	1	1	1	1	1
SPN (N=2)	1	0	1	1	1	1	1	2	1	1	1

Table 4: Pixley ka Seme municipality (N=38) training needs

Staff Job title	VCT	PMTC	Revised PMTCT guidelines	M-to-M	ARV (for PMTCT)	Infant feeding (for PMTCT)	Family planning	Well baby	Home based care	ART adherence counselling	Dual therapy
CPN (N=1)	1	1	1	1	1	1	1	1	1	1	1
ENA (N=10)	7	8	9	10	10	10	10	10	10	8	10
GNA (N=7)	7	7	7	7	7	7	7	7	7	7	7
LC (N=8)	0	5	7	8	8	8	8	8	8	7	8
PN (N=11)	7	6	8	11	8	7	8	5	11	10	11
SPN (N=1)	1	0	0	1	0	1	1	1	1	1	1

2.3. Guidelines

Table 5: Available National Guidelines

More than half of the facilities did not have required national guidelines with one exception.

National Guidelines, available	Albert N=20	Luthuli	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pixley ka Seme N=8	Total N=72
Feeding of Infants of HIV+ mothers	2		4	5	2	2	10	1	26
Management of occupational exposure to HIV	6		4	2	0	2	10	1	25
Managing HIV in children	7		2	4	3	3	10	1	30
Prevention of Rx of opportunistic and HIV related diseases in adults	5		2	3	1	1	9	2	23
Prevention of mother to child transmission and management of HIV+ pregnant women	12		4	4	2	5	10	1	38
Rapid HIV testing	8		3	4	2	2	9	1	29
Testing for HIV	7		3	5	0	6	9	1	31
TB and HIV	7		3	3	2	5	9	2	31
Home based care and community based care	1		2	1	0	1	3	1	9
Contraception guidelines	5		3	5	2	8	9	1	33
Dual therapy	8		0	0	0	0	6	0	14

Recommendation

- Provide all facilities with guidelines
- Put copies of guidelines on CD for back up purposes
- Have a reference point in the facility where all guidelines are kept

Table 6: Available Provincial Guidelines

Provincial Guidelines, records available	Albert Luthuli N=20	Dipalesen N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pixley ka Seme N=8	Total N=72
Updated protocol/guidelines for PMTCT	12	4	7	4	10	10	1	48
Protocol for needle stick injury	4	3	5	0	1	10	2	25
PEP protocol for rape victims	5	3	6	0	7	10	1	32
Guidelines for management of STIs	7	5	7	5	9	10	1	44
Updated protocol/guidelines for VCT	6	1	1	0	6	4	1	19
PCR testing protocol	1	3	3	0	3	5	0	15
Scope of practice for lay counselors	0	0	4	0	6	9	0	19
Quality control guidelines	1	1	3	0	1	6	0	12

More than half of the facilities did not have required provincial guidelines with few exceptions.

Recommendation

- Provide all facilities with guidelines
- Put copies of guidelines on CD for back up purposes
- Have a reference point in the facility where all guidelines are kept

2.4. IEC Material

Table 7: Available IEC material

Available IEC material	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pixley ka Seme N=8	Total N=72
HIV related posters on display boards	11	4	5	5	12	10	5	52
Pamphlets and leaflets available	11	4	7	6	8	9	4	49

Lay counselors give health education in the waiting room	16	5	10	6	11	10	7	65
Facility hosts HIV-related health days	9	3	6	4	9	9	1	41

More than half of the facilities had IEC material and gave health talks, however there is room for improvement.

Recommendation

- Assist facilities that reported to have no IEC material in getting them as well as in having health talks.

2.5. Support Groups

Table 8: Availability of support groups

Availability of support groups	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pitso ka Seme N=8	Total N=72
Support groups for HIV+ mothers in your clinic area	0	1	2	4	4	3	2	16

There were generally no support groups specifically for HIV+ mothers in all the sub-districts.

Suggested intervention

- To initiate support group in selected facilities

2.6. VCT Practices

Table 9: VCT practices

VCT practices	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pitso ka Seme N=8	Total N=72
HIV testing codes recorded on ANC cards	17	5	10	5	12	8	8	65
Family planning methods recorded on ANC cards	15	5	9	4	7	9	6	55

Growth monitoring of infants recorded on ANC cards	15	5	3	6	2	3	6	40
Immunizations recorded on ANC cards	15	4	2	6	1	2	7	37
Patients refuse testing	16	2	9	5	12	10	8	62
HIV test kits stored in safe place	16	5	10	5	11	10	7	64
Consent forms filed and available	16	5	11	6	12	10	7	67
NVP tablets in stock	12	4	11	6	10	10	8	61
AZT tablets in stock	4	1	0	0	0	0	2	7
Drug register in use and in order (monthly checks)	13	4	10	6	7	10	7	57
Shortages of ARV drugs in past 3 months	1	2	11	0	1	1	0	16
Rapid testing available on site	17	5	11	6	12	10	8	69
PNs available to do HIV testing:								
One	4	2	1	0	1	2	1	11
Two	6	1	4	4	3	2	2	22
Three	3	1	2	1	4	5	1	17
Four	2	1	0	0	1	1	3	8
Five	0	0	1	0	0	0	0	1
Six	0	0	0	0	0	0	1	1
Seven	0	0	1	0	0	0	0	1
Eight	0	0	1	0	1	0	0	2
Ten	0	0	1	1	1	0	0	3
Sixteen	0	0	0	0	1	0	0	1

More than half of the facilities recorded HIV testing codes (n = 65), family planning methods (n = 55), growth monitoring of infants (n = 40) and immunizations (n = 37) on ANC cards, stored HIV test kits in a safe place (n = 64), had consent forms filed and available (n = 67), had NVP tablets in stock (n = 61), provided rapid testing (n = 69) and used drug register (n = 57). Interesting to note is the fact that only seven facilities provided AZT. About 16 facilities reported to have had a shortage of ARVs in the past three months. All facilities had at least one PN responsible for HIV testing except in Lekwa.

Suggested intervention

- While common practices were observed in most clinics, there are certainly discrepancies in some cases. There is a need for standardization of provision of PMTCT services. It is recommended that VCT/PMTCT training must be provided to all health personnel involved in rendering PMTCT services.

2.7. Lay Counselors

Table 10: Lay counseling practices

Lay counseling practices	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pixley ka Seme N=8	Total N=72
Clinics with 2 or more lay counselors	10	2	9	5	10	6	6	48
Clinics have a counseling room	12	5	10	6	12	10	8	63
Rooms private and with conducive layout to HIV testing	15	5	8	5	9	10	7	59
Work schedule for lay counselors	13	3	0, but they do work everyday	2	0	0, but they do work everyday	3	21

Generally clinics had at least 2 lay counselors (n = 48) with few exceptions. They also had counseling room with conducive layout to HIV testing (n = 63). However, just above a quarter (n = 21) had work schedule for lay counselors in spite of the fact that they worked everyday.

Suggested intervention

- Assist those facilities that do not have the required number of lay counselors in appointing them
- Assist facilities in developing work schedules for lay counselors

2.8. Family Planning

Table 11: Family Planning practices

Family Planning practices	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pixley ka Seme N=8	Total N=72
Promotion of contraceptive: talks, posters, videos	14	4	3	5	8	8	7	49
Promotion of VCT in family planning clinic	17	5	4	6	8	9	8	57

Promotion of family planning during ANC and PNC	17	3	3	6	8	8	7	52
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Family planning appeared to be promoted by more than half of the facilities; however, a sizeable number of clinics did not promote family planning.

Suggested Intervention

- Facilities to promote family planning

2.9. PCR Testing Practices

Table 12: PCR Testing Practices

PCR Testing Practices	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pixley ka Seme N=8	Total N=72
PCR testing onsite	13	5	9	5	11	7	4	54
PCR test kits in stock	12	5	9	5	11	7	4	53

More than half of the did PCR testing on site and had PCR testing kits in stock.

Suggested Intervention

- Assist all facilities in having PCR testing on site

2.10. Infant feeding

Table 13: Infant feeding practices

Infant feeding practices	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukaligwa N =10	Pixley ka Seme N=8	Total N=72
HIV+ mothers given counseling about infant feeding options	17	5	11	6	12	10	8	69
Infant formula provided to HIV+ mothers	17	5	11	6	11	9	8	67
Infant formula in stock	14	5	10	6	9	9	6	59
Shortages of infant formula in the last 3 months	16	3	11	6	11	9	8	64
No. of tins supplied to each mother per month								0
One	0	0	0	0	0	0	1	1

Two	0	0	2	1	0	0	1	4
Three	0	1	0	0	1	0	0	2
Four	5	0	2	1	0	1	6	15
Six	2	3	5	3	5	7	5	30
Seven	2	0	1	0	2	0	2	7
Eight	7	0	1	0	2	0	8	18
Twelve	0	0	0	0	1	0	0	1

An overwhelming majority of clinics reported that they gave HIV+ mothers counseling about infant feeding options (n = 69), provided infant feeding formula (n = 67), had infant feeding formula in stock (n = 59). More than two-thirds (n = 64) experienced shortages of infant formula in the last three months. The number of formula tins provided varied with most giving 6 tins per month (n = 30).

Recommendation

Systems to be put in place to avoid formula supply shortages

2.11. Follow up of babies and mothers

Table 14: Follow up of babies and mothers practices

Follow up of babies and mothers practices	Albert Luthuli N=20	Dipaleseng N=5	Govan Mbeki N = 11	Lekwa N = 6	Mkhondo N =12	Msukailigwa N =10	Pitso ka Seme N=8	Total N=72
Method in place to follow up infants born of HIV+ mothers	13	5	4	4	8	8	3	45

While most facilities (n = 45) reported that they had methods to follow up infants born of HIV+ mothers, a sizeable number did not have them.

Suggested Intervention

Assist facilities in developing and implementing methods to follow up infants born of HIV+ mothers, learning from the success stories of other clinics.

2.12.. National PMTCT Site Indicators
Table 15: National PMTCT Site Indicators

National PMTCT Site Indicators	Albert Luthuli N=20	Dipales eng N=5	Govan Mbeki N = 11	Lekw a N = 6	Mkhon do N =12	Msukallig wa N =10	Pixley ka Seme N=8	Total N=72
On-site counselling for HIV testing	14	4	11	6	12	10	8	65
On-site HIV testing	14	5	10	6	12	10	8	65
Private room in which VCT can be conducted	13	5	11	6	12	9	8	64
Daily availability of VCT	14	5	10	5	12	10	8	64
Referral to ARV site	14	5	9	5	10	9	8	60
CD4 count testing	14	5	11	6	12	10	7	65
ARV prophylaxis (AZT) given to mother at 28 weeks	5	1	0	2	0	0	0	8
ARV prophylaxis (nevirapine) given to mother at 28 weeks	7	5	11	6	11	10	8	58
ARV prophylaxis given to baby within 72 hours of birth	10	1	4	3	8	8	5	39
Antenatal counselling on infant feeding	13	5	10	6	12	9	6	61
Postnatal counselling and support for infant feeding	13	5	11	6	12	10	8	65
Adequate supply of free infant formula	9	5	10	3	12	9	4	52

National PMTCT Site Indicators	Albert Luthuli N=20	Dipales eng N=5	Govan Mbeki N = 11	Lekw a N = 6	Mkhon do N =12	Msukalig wa N =10	Pixley ka Seme N=8	Total N=72
PCR testing for infants for HIV infection	9	5	9	4	11	7	6	51
At least two trained PMTCT counsellors/service providers per facility	8	5	10	5	9	9	4	50
At least two trained lay counsellors per facility	7	4	10	5	10	9	4	49
A support group specific to HIV-positive mothers and pregnant women	0	1	5	0	6	4	1	17
Dual therapy	8	1	0	2	0	0	1	12
Provider initiated/routine testing	5	4	9	4	8	9	4	43

As per above table, around 50% of the facilities On-site counselling for HIV testing; On-site HIV testing Private room in which VCT can be conducted; Daily availability of VCT; Referral to ARV site; CD4 count testing; Antenatal counselling on infant feeding and postnatal counselling and support for infant. The remainder of the indicators were there only in few facilities.

Recommendation

- Assist all facilities to meet National PMTCT Indicators

12. PMTCT programme manager's views about PMTCT

Albert Luthuli & Pixley open-ended results

Table 1 gives an overview of problems experienced in the implementation of PMTCT.

1a) Health policy	1b) Health services	1c) Clients
Problems with dual therapy	Shortage of staff	Illiteracy
Problems with Monitoring and evaluation	PCR changelles	Unwillingness to test themselves and babies
Lack of follow-up	Untrained staff	Lack of ID documents
Problems with guidelines	Understaffed	Low compliance
Stigma	Space problem	
	Lack of supervision	
	Infrastructure problems	

The outcome of the Rapid Assessments is as follows on the open ended questions:

Problems with Dual Therapy

Untrained staff in terms of Dual therapy and/or PMTCT

From the rapid assessments of the clinics, there was a mention in two clinics that there is still a need for staff to get training on dual therapy and PMTCT. The PMTCT programme is said to be affected because of untrained and shortage of staff.

Need more training on untrained staff. Staff shortage also is a challenge (Davel)
Programme is not going well due to staff (Emthonjeni)

Starting with AZT

A few clinics mentioned that training has been done and AZT has been introduced but it hasn't been implemented at their facilities. Other clinics said that AZT started in January 2009 while other clinics expressed that they do not have AZT on stock and have ordered for it to be delivered. Derby clinic have just started with PCR testing.

Only starting on the 1st January 2009 with AZT (Kwa zanele)
Nurses have undergone training on dual therapy (PMTCT update) but have not implemented it (Davel)
Dual therapy that was introduced-not started yet (Msimango)
The new thing that is coming is the introduction of AZT. The clinic has ordered (Bulfour)
Started AZT beginning of January 2009. So far everything is fine (Siyathemba)
The clients are referred to the hospital for AZT (Swallownest, AL).
AZT not yet available in facility for dual therapy (Swallownest, AL)

Problems with Monitoring and Evaluation

Women forget to take NVP prior to delivery and Home delivery

There are a low percentage of women forgetting to take their Nevirapine closer at 28 as indicated by the nurse at Thando and Amsterdam clinics. There is also a challenge with women who opt to deliver babies at home.

"Pregnant women come for VCT and testing, they also come and get NVP. Some patients book late at 36 weeks (Thando)

There is a challenge of women who deliver at home, and they do not get NVP (Amsterdam)"

Lack of follow ups

While there are many clinics that have put up a method to secure follow up of infants and mothers, other clinics don't seem to have a method in place to ensure follow up of children born to HIV positive mothers. This is partly blamed on women because they complain about the distance between their home and the clinic as well as a lack of transport. This leads to many of them having home deliveries which interfere with the clinic system.

Women do not come for follow-up visits due to distance. HBC do follow-up's with them, some still don't turn up. Some women start ANC very late (at 32 weeks) (New Scotland)

Some woman don't come back to get their Eliza and CD4 count results. Some are reluctant to take ARV, because they want to qualify for a grant (Evander)

No back referral from ART sites for pregnant women. (Haartebeeskop, AL)

Hospitals do not indicate that the mother is positive. As a result the clinic is unable to follow-up on babies. Mother's remove the information page attach on their file (Kempville)

Follow-up with patients-no phone in the clinic. Some women do not come back after delivery-they go to clinics of their choice. Some deliver at home and come 3 months later to there clinic; the baby never been immunized. Some women do not want to be tested (PR town)

Not sure because woman don't come back here for follow-up, they go to wellness clinics and paediatrician clinic (Ermelo)

Problems with guidelines

Some mentioned policy conflicts on infant feeding that confuses patients.

Feeding of the babies, the hospitals change infants feeding methods (Pix)

Mothers cut codes on the patient file

Some clinics had a problem with the coding of the ANC cards, mothers tearing or changing the codes but now they have an understanding of how those actions could impact on them.

"The challenge is that they cut the codes patient file; this is because they have not accept their status (Bethal)

They use to change the codes, but now they are very clear on how it will impact on them (Kempville)

Clients tear codes on their cards (Leandra)

Manipulation coding (woman changing names on each visit). Changing of clinics in order for their status to not be known (Emthonjeni)

Woman did not want codes to be put on their cards because they had an ideology that codes mean you are HIV+, Woman refuse to test on their first visit (Breyton)

Women know their status but hide it and end up mix feeding

The PMTCT programme is said to be going well because most women know their status but have a problem disclosing to their families and or friends. There are more babies who test negative after 6 weeks when they do their PCR tests and their mothers have taken Nevirapine during pregnancy at 28 weeks. The main problem that the clinics are facing is that women are not

disclosing their status, they are mix feeding which leads to babies becoming/getting HIV positive. Not having enough milk supply at the clinics also contribute to mix feeding. The health talks/education that the lay counselors provide at the clinic has had a huge impact on how the programme is running. Women are now willing to test and know their status although some of them hide it until they are very sick to get help. There is also concern that some women refuse their babies to be tested because they are scared what the outcome might be.

The programme is going well because women know about their status and they live a healthy life. Babies born to HIV+ mothers are negative because their mother's took nevirapine (Kwa chibi) The programme is not active because mothers are mix feeding. They have received health education but they continue to do that. Sometimes woman hide their status, until they are very sick. Mother's do not report baby's death. HIV statistics book was torn; some records are not there (Slindile)

There is also a challenge because nurses contribute to mix feeding. When the client says she does not have enough milk. They give the baby formula but encourage the mother to continue breastfeeding (Bethal)

The PMTCT programme is going well because most of the patients understand it and they are willing to accept their status. The challenge is with the older women because they deny their status (Driefontein old)

There is still mix feeding even if information is given. They forget to take NVP and give birth at home, and it is too late to help the babies (Dirkiesdorp)

Women test, refuse baby to be tested-afraid of outcome-mother's do not remind staff of testing (Sakhile)

Problems start after the baby is born. Mother chooses formula feeding, but due to home pressures forces her to mix feed (Morgezon)

Stigma

About 14 clinics complained that a lot of women lie about their status and to an extent fail to accept their status because of Stigma. Consequences are that:

- mothers end up mix feeding due to family pressures
- they manipulate coding on ANC cards
- denial
- no follow ups
- reluctance to take prophylaxis after PCR
- moving from one clinic to another
- not taking Nevirapine
- refusing ARVs
- copy codes to avoid VCT
- refusal to test

Mother's don't want to breastfeed. Mother's refuse to test for HIV. Mother's lie about their status (Kwa zanele)

Some woman are reluctant to test Mother's are mixed feeding. Women find it very difficult to disclose their HIV status to their families-that is why there is mixed feeding. Some woman forget to take NVP before labor (Evander hosp)

Some women are in denial, when you give them their results (First Street)

Some (especially young ones) do not want to know their status. Migrant workers don't come for follow-ups. When the counsellor is off, the sister struggles to do everything alone (Trichard)

Mother denies the child to be tested (Stanwest)

Clients' copied codes onto their records so as to not go for counselling HIV+ mother's go to VCT with the idea of being HIV-. Refused to test the baby, after 6 weeks-still a challenge (Morgenzon)

HIV positive women go from one clinic to another in order for their status to not be known (Bulfour)

Some come late for ANC because they stay from the clinic. Some do not want to accept their status right away. But through counseling they accept (greyling)
 After delivery women bring babies for PCR but are reluctant to take prophylaxis. (Siyathemba)
 Some women do not accept their status. Some positive women are afraid of disclosing because of stigma (Nthorwane)
 Some women deny their status. Other women do not take NVP. Mother's who are HIV positive and not wanting to take ARV'S because they are positive. Patients do not go to hospital when they are referred by the clinic because of transport challenges (driefontein old)
 Stigma re: formula feeding-few women disclose HIV status (Sakhile)

Women don't come for testing after health talks

It came to our attention that most patients prefer group counseling and are not willing to do individual testing. In some clinics, patients are refusing to test because they would rather know their status once the baby has been delivered. On the other hand, patients are refusing to test because the lay counselors are from the same community as them and are afraid of the confidentiality issues while others are testing but refusing their babies to test.

According to PMTCT graph, the patients participate in group counseling but not individually testing (Leandra)

The programme needs to improve because lots of woman still refuses to do testing; they only want to know after delivery (Trichard)

Women test, refuse baby to be tested-afraid of outcome-mother's do not remind staff of testing
 Can't maintain follow ups (Sakhile)

The programme is partially going well because there is a challenge when it comes to VCT. The lay counsellors are from the community, people are afraid to test, because of confidentiality issue (Entombe)

No milk for babies

While women are accepting their status and willing to do anything to keep their babies negative, the shortage of milk is forcing them to mix feed. There have been shortages of formula supply in about 10 clinics in the past months. Some clinics have gone through a year without milk.

They think they are trick to test, but on the other side the clinic is not providing milk (Davel)
 Only challenge is that there is no milk for babies (Ermelo town)

The milk supply is not good (Evander)

The programme is not going well because there was a shortage of milk for almost a year (Kinross)

There was a problem with the supply of milk from March-June 2008. But now they have started supplying the clinic with milk (Stanwest)

Formula supply very scarce (Stanwest)

Mother's do not want to exclusively breastfeed (Mispel)

There was no milk all this time, only received milk last week. (Evander)

Never had milk for almost 1 year, only a month ago (October) milk was supply (Kinross)

There was a problem with the supply of milk from March-June 2008. But now they have started supplying the clinic with milk (Sead) (Embalenhle)

Mothers decide on method of feeding

Mothers are now afforded with an opportunity to choose whether they want to exclusively breastfeed or formula feed. Health education seems to be going well in most clinics because the freedom to choose comes about these health talks. Mothers are also encouraged to live a healthy lifestyle.

Mother can choose between formula feeding and breastfeeding. Nevirapine is given on time (Kwa zanele)

Most woman who have tested are not willing to breastfeed, so the health education is working very well (Breyton)

The child is prevented from getting HIV. Mother are encouraged to live a healthy lifestyle. Health education messages are effective (Nthorwane)

Deciding on feeding methods (Dirkiesdorp)

Women don't attend ANC due to transport

One clinic reported that women don't attend ANC visits as a result of long distances between the patient's residence and the clinic as well as a lack of transport.

The programme is not going good because the attendance is not very good. The problem is with the distance as a result we have people defaulting because of that. There is no transport for the patient to travel to the clinic (New Scotland)

Mix feeding

In 12 of the clinics that we evaluated, mix feeding seems to be the biggest challenge that mothers are facing. They are unable to stick to one method of feeding. This happens when clinics are not having enough supply of milk or not having stock at all. Women find it very difficult to disclose their status at home hence they mix feed. Others are mix feeding because they are of the opinion that their babies are not getting enough from the formula alone and would rather breastfeed them as well. This leads to HIV born negative babies to becoming infected with HIV. One other challenge that women are faced with is that if they run short of formula they give cow milk to their babies.

Mixed feeding is a challenge (Ermelo town)

There has been a challenge around the visits of ANC mother's because of lack of milk supply (MN cindi)

Mixed feeding of children born to HIV+ mothers, most women are refusing to test. Coming late for antenatal (from 8 months) (Emthonjeni)

Mother's do not exclusively breastfeed, they mix feed. Some women come late for ANC at 36 weeks (Slindile)

Patient mix feeding due to family members who would wonder why she is not breastfeeding (Bethal hosp)

Some woman are reluctant to test Mother's are mixed feeding. Woman find it very difficult to disclose their HIV status to their families-that is why there is mixed feeding (Leandra)

Some mother's mix feed (Evander)

Mother's are mix feeding and their babies contract the virus (Leandra)

Other women are mix feeding, saying their babies are not getting full (First street)

Mother's are mix feeding because the family members are surprised why they are not breastfeeding (Bethal town)

Mixed feeding still happen (Sakhile)

Clients questioning why HIV mother's must breastfeed. Mix feeding. Teenage pregnancy, when schools are opened teenage mothers can't come to the clinic (Grootvlei)

Mixed feeding. Mother's find it difficult to disclose to families. They use cow milk to feed the baby if they run short of the free milk (dirkiesdorp)

Problems with Health Services

Shortage of staff

VCT and PMTCT services have only one trained person for each in standerton hospital. They also do not have someone to give health talks or counseling at times.

*Shortage of staff only one PMTCT and VCT trained (Standerton hosp)
Staff shortage, counselling and health talks take time. Staff rate has decreased. Some patients are impatient and difficult. If people don't volunteer it becomes difficult. They must take out volunteer and make it law to test (Standerton hosp)*

PCR challenges

About 3 clinics reported that mothers don't want their babies to take PCR tests because are afraid of the outcome of the results. Meanwhile the nurses at the clinic reports that they are struggling to get enough blood from the babies.

*Also lots of mother's don't want their babies to do PCR they don't want to know babies status (Secunda)
Sister is having challenges with doing PCR for babies; nurses are struggling to get enough blood from babies (Evander)*

Benefits of PMTCT

Free milk

Some of the major benefits that the PMTCT programme has afforded patients are the dispensation of free formula milk. This also ensures follow up of babies because mothers have to come to the clinic to collect milk. The babies have more chance of being HIV negative because their mothers are exclusively formula feeding them.

*Conducting PCR-most babies are negative (Emthonjeni)
Free formula for children-mother's come for follow-up. PMTCT provides an opportunity for mother's to get treatment in order not to infect her baby (Ermelo town)
At least people are aware of HIV/AIDS. Mother's are getting free milk (Kinross)
Babies are getting free formula. Babies are born negative. Babies come for follow-up visit at 18 months (siyathemba)
Out of stock formula is difficult to explain -difficult for clients to accept (Msimango)
Women who are positive do not want to breastfeed because they know they will get free milk (iswepe)*

PCR register

There is now a system in place that the clinic use to ensure that all babies who come for PCR are recorded by means of PCR register.

*There is now a register for PCR and the cards for the babies. All mothers's who come for postnatal at six weeks, regardless of their status they go for counseling (Kinross)
Introduction of the PCR testing (Derby)
Have PCR records (Kinross)*

Encourage exclusive breastfeeding

The PMTCT programme assists and encourages women to exclusively breastfeed and this is done up to 6 months regardless of the woman's HIV status.

*We assist and encourage to exclusively breastfeed (Mispel)
PMTCT campaigns focusing on the feeding method especially breast feeding by PMTCT
Mother's. Some mother's exclusive breastfeed (Morgenzon)
Breastfeeding-mother's are encouraged to breastfeed even if they are HIV positive for 6 months (Driefontein old)*

Babies get treatment early

Almost all the clinics are happy that babies getting treatment early. Firstly their mothers take Nevirapine and then 6 weeks after delivery they bring their babies for PCR testing. Secondly, there is free formula milk that is given to babies whose mothers are HIV positive so that they exclusively breastfeed and this limit their chances of being infected with HIV because their mothers will not be mix feeding. Malnutrition has also decreased because of the free formula that is given at the clinic. Mothers test earlier during pregnancy and get to know their status. Communities are now said to be supportive of families affected and infected by HIV. It has been noted that there is a decrease in the transmission of HIV to the baby. More women are said to be condomising now because they know their status and willing to take treatment earlier to save their lives and that of their babies. Finally, women being aware of their HIV status earlier in pregnancy ensure continuity in the care and management of PMTCT programme.

Babies get help early if they are positive they are referred to treatment site. Mother's get free milk for babies. Mother's get ongoing counselling. The health of the mother improve because they get prophylaxis (Kwa chibi)

Most children are born HIV negative since the introduction of PMTCT ANC woman knows about their status (Davel)

Help the mother to maintain the health of baby. Babies are born negative if the mother has taken medication. Mother's accept their status and they visit clinic for help.

Conducting PCR-most babies are negative (Kwa zanele)

Most PCR tests are negative (Breighton)

Babies are born negative. Mother's health has improve significantly, as a result they do not have problems. Communities is now supportive to their children and family members (Slindile)

Decrease HIV transmission to the baby. Mother's informed about PMTCT. Mother's are eager to do VCT at first visit (Secunda)

Babies are born negative (Kinross)

Babies are benefiting because they are born negative. Mother's get treatment and their health improves (Evander hosp)

Most babies are born negative if mother has taken NVP. Malnutrition has decreased due to pellargon supply. Most mothers are not positive towards checking their status (Embalenhle)

Babies are protected from contracting HIV. Women are well informed about HIV. There is a decrease of death for both mother's and babies. Decrease in number of full blown AIDS, because women are taking prophylaxis (Leandra)

Babies are born negative, Mother's can check their CD4 count to see if they qualify for ARV (Sead)

Babies whose mother's have taken NVP are born negative. Mother's do go for wellness clinic.

Mother's come to do CD4 count after delivery (First Street)

Babies are born negative, only two positive this year. Women are condomising. Women are told about mix feeding. Women also come for CD4 count after delivery (Bethal town)

Reduce the rate of HIV transmission to babies. Better adherence to the programme by mothers. More women are coming for testing (Trichard)

Babies have been tested negative and we feel PMTCT is needed and the mother's are realizing that and it is encouraging. Further treatment and referrals make them strong. Need for testing really helps them (Stanwest)

Lots of babies on the programme are negative. If we have a positive baby we check if the mothers comply with the PMTCT programme (Mispel)

Neonatal mortality very low now-Most mother know their status-measures in place to protect the baby-babies born to HIV+ mother's are negative-Even after 6 months of exclusive breastfeeding, 6 weeks formula fed babies are also HIV-. PMTCT is helping (Morgenzon)

Babies HIV- to HIV+ mother's-greatest achievement. Some new furniture for VCT room and blinds and air conditioner. Some of the nurse on PMTCT and VCT (Msimango)

Pregnant HIV+ women who are healthy, babies born to HIV+ mother's are HIV--motivate others through revealing HIV+ status. HIV + mother's go/attend for ARV (Sakhile)

Well babies. More healthy (grootvlei)

To get a healthy baby. Mother's also get to know their status and act accordingly (Kempville)

Babies are born negative. Mother's get more information on the prevention of mother to child transmission. Women are now motivated to bring babies for PCR testing (PR town)

ANC and postnatal patients received VCT services. Improve correct referral programme to all patients. Awareness of HIV on early pregnancy of women. Ensure continuity in the care and management of PMTCT. Babies are born negative if the mother has taken nvp. Women are tested during ANC for the prevention of mother to child transmission. Women receive screening on STI and OI'S (PR hosp)

Most of the babies are born negative (after doing PCR at 6 weeks. Patients get an opportunity to start treatment and get better. Women get to know their status (Driefontein old)

Children born to HIV positive mothers are well. Mother's who are pregnant are used to the VCT (Iswepe)

Lifespan of the mother's and babies have changed. There is less transmission of HIV from mother to child. (Dirkiesdorp)

Repeat tests and referral

Mothers who have tested HIV positive go back to the clinics for their CD4 count test results and to collect milk or any food supplement provided by the clinics. Referral system is said to be going well at and Kinross and Leandra clinic.

Mother's who have tested positive come back for CD4 count. Children are getting food supplement. (Kinross)

Just doing the normal routine work for PMTCT. The referral system is going well (Evander hosp)
The referral system to ART site is going well (Leandra)

Know their status and follow ups

The women who know their HIV status make sure that they come for follow ups. This also helps the mothers to take care of themselves and their babies. There is also improvement on the in take of CD4 count testing as well as PCR testing for babies. Some women also decide on sterilization as one of the method of contraception as they don't want to have more babies after they find out their HIV status. More people are now well informed when it comes to HIV. Women want to know their status so that they can take treatment earlier.

Women get to know their status, a proper follow-up for the mother and baby is done. Treatment is provided timeously if the patients came on time. (New Scotland)

Knowing the patient status helps the health provider to be able to act accordingly. Patients are transferred to wellness centre in order to get proper help (Bethal hosp)

Improvement on postnatal woman, they do take blood for CD4 count and also bring babies to be tested (Evander)

Some babies born are HIV-, through education. Some women no longer want to have more babies and request sterilization when they are negative and that is good because it safe their lives (Standerton)

People are informed about HIV. Women are now coming to test to know their status. Women who are in the programme are taking treatment to get better (driefontein new)

Mother's get to know their status when they are pregnant. They receive free counselling. Women get NVP to protect the child from getting HIV. Exclusive feeding is encourage (Thando)

Mother's come forward for testing. Women come early for ANC. Babies are born negative.

Mother's are placed on ARV, for them to get better (Amsterdam)

The programme is helpful because the clinic accommodates people in this area. They do not use transport to come to clinic. Women who participate in VCT knows about their status (Entombe)

To empower the pregnant women so the children don't get HIV (Kwa ngema)

Follow ups and feeding options

Women are no longer defaulting on their follow up sessions, they actually come back. They also use the milk and PCR register to monitor follow-ups.

Woman are not defaulting after delivery, they come back for follow-up.

Have a good tracking system for infants born at the hospital (have addresses, phone numbers) (Trichard)

PMTCT services are provided professionally. Follow-ups for patients. All patients are tested for HIV (PR town)

Tracing of mother's to bring children for PCR testing. Milk register is used to trace the babies to come for testing (Amsterdam)

Willingness to test and doing PCR after 6 weeks

Clinics have reported that most women are more willing to test, reasons are that:

- Once they receive group counseling they are more willing to test.
- PCR is conducted at 6 weeks
- Records of on baby, milk, porridge and PMTCT are kept
- Even grandmothers who are looking after the babies are bringing them to test
- VCT is done on all pregnant women
- Family planning methods are also discuss
- There is also records available for all the babies who have done PCR
- Some patients want to start with dual therapy

Conducting PCR to babies at 6 weeks. Test for cd4 count. Women is willing to test individually once they have received group counseling (Kwa chibi)

Providing PCR services. Providing postnatal care. Prophylactic treatment for postnatal mother. Keep records on baby, milk, porridge, pmtct. Won trophy-best clinic for immunization and with a campaign (Kwa zanele)

Mothers are testing. And grandmother's who are looking after babies, they bring them for PCR. Provision of health talks at the clinic to the community at large (Slindile)

VCT is done to all ANC women. Group counseling is going very well (Ermelo town)

Mother's who come for ANC get educational messages about PMTCT. Mother's to be participate in VCT. Mother's also get information about family planning options (New Scotland)

More mother's go for VCT. Have good records (positive mothers, CD4 count, statistics, referral to wellness clinic (Secunda)

Babies are tested for PCR, and they are all negative (Davel)

Records for babies who have done PCR (Sead)

Clients was the first to start dual therapy (Mispel)

Most of the things are done at the clinic, they have increased testing, and they don't let people go without testing (Standerton hosp)

The CHC is good at identifying the positive mother's when they come for ANC. The women take NVP before delivery (siyathemba)

This clinic is very good in VCT, people come for testing and clear records are kept (Nthorwane)

The other clinics benchmarked on Kempville clinic for PCR testing. Kempville is the first clinic in this sub district to provide PCR (Kempville)

TB patients have done well, got a trophy for the best HIV/TB clinic in GERT Sibande district (Iswepe)

High number of ANC women testing. Educational messages given to patients (Thando)

All patients are screened for VCT before being check up (not yet official) Patients come forward to test (Amsterdam)

Follow-ups visits with mothers are good. Every Monday when mothers bring children for immunization there is health education on HIV and they encourage bringing more people from community. During ANC visit mothers do not have a problem to be tested (Entombe)

Support groups

There are at least 2 clinics that have established support groups for women who are HIV positive in their communities. Some communities are still initiating for the support groups to be formed.

Have managed to implement support group (Davel)
This was the only clinic with a support group (Emthonjeni)
Initiation of a support group (Kwa chibi)
Starting a support group (Ermelo town)

Health talks

The clinics have health talk freely available and accessible everyday at the clinics. They offer counseling on infant feeding and lifestyle behavior. They are remarkably changing a lot of women's health lives. Because of these health talks a lot of women are voluntarily testing for HIV and CD4 count testing. Health talks are also important for follow ups as it assures women that it is the right thing to do after you have found out about your HIV status.

Providing pre/postnatal counseling on infant feeding. Advice patients on lifestyle behavior (ie.condomising).Adherence on treatment. Advice on diet (Bethal hosp)
Health talks on a daily basis (Evander)
The health education talks have made a remarkable change in women's health. Have a system in place to follow-up for patients when the CD4 count is down (First Street)
The health talks are going well and there is a change in the mindset of woman (Bethal town)
People volunteer on their own to test because of the health talks and we encourage everyone to listen (Stanwest)
Positive women are advised to take their babies for CD4 counting. Health education on the importance of follow ups for results of PCR (PR hosp)
The health education -on VCT, most of the patients who test come back after 3 months. Mother's are breastfeeding regardless of their status (driefontein old)
There are a high number of people coming to test because of the health education they are getting from the clinic (driefontein new)
Mother's are benefiting from health education (Iswepe)
Women and all patients get health education. VCT is encouraged to all women and other patients. Parents bring their teenagers who are pregnant to know what is happening (Derby)
Group counseling introduced, and then individual counseling afterwards. Working, interaction becomes possible during group sessions (Morgenzon)
Have VCT lay counselors and have them available everyday (Kwa ngema)

Problems facing the PMTCT programme concerning clients

Illiteracy

Some of the barriers in Mpumalanga for women are lack of education as some women do not really understand what is happening when for instance they have been referred to a referral site.

Most woman are illiterate- they do not understand when they are been referred (Kwa chibi)

Refusing to test themselves or their babies

A lot of women are reported to have refused testing for their babies or themselves or to go through VCT for that matter. As a result they do not know their status. Women don't also come for follow ups and this makes it difficult for the clinic to trace them. Some women are totally refusing their babies to take the PCR test. Some women even if they do test and get their results and are positive they are not willing to disclose because they lack family support and they would rather keep it to themselves. One clinic reported that young women especially, do not want to test

because they are scared of disclosing their status. They also do not test their babies after 6 weeks because most are born at home. Some young women don't want to test if they it is their first pregnancy and if they are pregnant they don't disclose to their husbands or family and opt for formula feed.

Mother don't want to test the babies for HIV (Kwa zanele)

Some women refuse to go through VCT and as a result they do not know their status (Ermelo status)

Women do not come for follow-up visits due to distance. HBC do follow-up's with them, some still don't turn up. Some women start ANC very late (at 32 weeks) (Secunda)

Some women are afraid to do PCR because they don't want to know babies status (Evander)

Some women do not disclose their status-so there is lack of family support. Women are not accepting their status r due to stigma. (Embalenhle)

Some women do not want to test. Some woman do not disclose their status, especially those coming from other facilities (Embalenhle)

Young women do not want to test. There are a lot of babies who are born at home. Mother's do not come in time for the 6 weeks for immunization. Lots of mother's mix feed (Amsterdam)

Some women do not want to test for the first time. Women who are positive do not tell their husbands and inlaws. Women opt for formula feed in order to get it from the clinics (derby)

Women are afraid of disclosing their status to their husbands (entombe)

They don't have ID documents

It was discovered that some of the women do not have id documents and they are coming from countries outside South Africa. This as a result this led them to not qualifying for the free formula supply. Another reason is that children born to women who don't have id documents lead to babies not having birth certificates as babies are delivered at home.

Mother's who don't have ID'S because they coming from other countries. As a result they do not qualify to get free milk (MN cindi)

Children who don't have birth certificates because their mother's do not have due to family problems (like grandchildren being raised by grandmother) (Kinross)

Low compliance

A number of issues around low compliance were mentioned including poor access to health facility, not returning for follow-up visits, unwillingness and ignorance about following treatment, problems with youth and unreported transfers.

Sometimes clients book late (Nhlazatshe 4; AL)

Some patients are from far away and only come for delivery. They do not come for follow up at the hospital (Carolina hosp, ALHos)

Mothers who do not understand why PMTCT drug are given to unborn child. Arrive late for 1st ANC visit - late HIV test. Few report back after delivery (Nhlazatshe 6, AL)

Referral to test for HIV, Problems of disclosure: Many "no comebacks" Clients do not come for CD4 results as counselling at that stage was not adequate (Dundonald, ALCHC)

Challenges with staff

Untrained staff

There is a lot of clinics who reported that they plenty of staff members who have not been trained for any of the PMTCT services and would like to be trained. There are clinics that have only two staff members trained on PMTCT services and this is making it difficult to implement the services fully. Some said they need refresher courses on PMTCT because they are unable to implement

PMTCT. Some clinics do not have dedicated space or equipment to implement PMTCT services. There is also the issue of understaffing which makes training difficult because clinics will not be left with no one just because other staff members have training to attend. The untrained staff is not clear about most things that PMTCT requires. The health personnel do not seem to be interested in PMTCT and are demotivated and need something to motivate them

The staff is not trained on PMTCT (Kwa chibi)

Staff training - only two staff members are trained, Clinics is too small-there are lots of programmes happening at clinic, it is difficult to implement all this at the clinic (Davel)

Lack of training of staff (Breyton)

The clinic staff needs to be trained on PMTCT. More staff needed to focus on the programme (Ermelo hosp)

Not all the staff members are trained, only one sister is trained (Secunda)

Lack of training on PMTCT, It is also difficult to change the old nurses who have been doing PMTCT work, to change, to change some of the things. Lack of staff to implement (Bethal hosp)

Lack of training for the staff (Emthonjeni)

Training for staff on PMTCT is critical (MN cindi)

Training courses on PMTCT for most staff. Update in training. No dedicated PMTCT space and equipment (Sakhile)

Training is a challenge because sisters are doing PMTCT work without training. There is some workshops done but due to shortage of staff it is difficult to attend (First Street)

Going for training is difficult for staff because of being understaffed in the clinic. Transport issues for nurses to and from the clinic (grootvlei)

Staff needs to be trained on PMTCT (bulfour)

The staff is not trained on PMTCT as a result they are not clear about most of the things (greyling)

The primary health personnel are not showing interest on PMTCT. Their morale is down because they are not motivated by management. The wellness staff is the one doing the work. The infrastructure is not good; the clinic is small to accommodate all patients. Run short of test kit in December but now is fine (siyathemba)

The staff is not trained on PMTCT as a result they are not 100% service due to lack of information. The clinic structure needs to be improved, more consultation rooms are needed (Nthorwane)

Staff is not trained on PMTCT. (Amsterdam)

Some staff is not trained on PMTCT (Entombe)

Training is not enough.(AL)

More training is needed on VCT, PMTCT and ART adherence.(AL)

Dual therapy is a challenge expected to deliver a service not trained for.(Pix)

Staff needs training /refresher courses. Staff cannot "specialise" in PMTCT as the facility has other focus areas (Pix Hos)

Understaffed

Almost all clinics complain about being understaffed and having one or no VCT room at all. This makes it impossible to implement the PMTCT services because of having few staff members. Some clinics are one woman/man run clinics and everything is dependent on one person and this makes it strenuous for the individual to perform their duties fully. Again the sisters are complaining that due to this factor staff is unable to attend training/s because there are not a lot of them at the clinics and if they are on training no one is going to replace them. Although some appreciated working under pressure, it is not an ideal environment for many to work under those conditions.

Understaffed. The clinic is small to provide all the services. There is only one VCT room-need one more (Kwa zanele)

Understaffing-It is impossible to implement this programme with few staff members (Emthonjeni)

Understaffing is a problem. Do not have HBC staff because there is no stipend (MN cindi)

Shortage of staff-the sister has to do everything (Ermelo town)
 There is only one professional nurse, if she is sick the patients go back, there is a need for more staff (New Scotland)
 Difficult to attend training because they are understaffed (evander)
 The staff is complaining about workload and also a increase in patients turn up (Embalenhle)
 There is a shortage of staff to do PMTCT work. Due to understaffing, the staff does not attend training related to PMTCT. (Bethal town)
 Shortage of personnel to provide PMTCT services. Capacity building of staff on PMTCT and related courses (Trichard)
 We are short staff. People who go are not being replaced (Stanwest)
 Understaffed, more staff would be highly appreciated. Health promoters must also be trained on this because they haven't been trained (Mispel)
 Shortage of staff-Most PN has not been trained on PMTCT and VCT. (Standerton hosp)
 Staff shortage means greater workload (Sakhile)
 There is a need for additional staff to work on the programme (Sead)
 The HAST coordinator invite all the staff to attend training, due to understaffing the staff does not attend (Leandra)
 The clinic is understaffed (kempville)
 The staff is not willing to cooperate with the sister who is responsible for PMTCT services. (PR hosp)
 There is a shortage of staff to implement the PMTCT programme (driefontein old)
 No, we don't have enough staff. We need a sister and more nurses and a clerk (Kwa ngema)
 Short staffed is not helpful as well. (Pix Hos)

Lack of support and supervision from clinic supervisors

A number of clinics reported a lack of support and supervision from clinic supervisors.

No support from clinic supervisors, only visit when they need something from the clinic (Vlakplaas, AL)
 No support and motivation from supervisors (Haartebeeskop, AL)
 Coordinators do not do supervision. Very little support from PHC co-ordinators. Staff attending is workshops but with no implementation. Workshops affect productivity of the facility. Not going well. Cannot do all that is required on the PMTCT programme. Workload that is prohibiting. Trained staff does not share with other. Staff not trained refuses to participate / learn from trained staff. (Pix)
 No visits or support from the co-ordinators. (Pix)

Improvement of PMTCT

Table 2 gives an overview of suggestions made by participants on the improvement of the PMTCT programme.

2a) Health policy	2b) Health services	2c) Clients
Dual therapy	Training of staff	Community awareness on PMTCT
Improve system of referral & follow-up	Provision of guidelines	Establish support groups
What can be improved	Additional staff	
	Improve stocks	
	Provision of computers and/or electronics	

Improve health policy

Dual therapy

Implementation of dual therapy – Dirkiesdorp

Improve system of referral & follow-up

There was a need identified to improve referral services

HBC trace patients. Special referral forms used (AL)

Referral system from hospital to clinic

Follow-up and home visits

What can be improved?

Most clinics expressed that they have one VCT room and that the clinics are small. Infrastructure must be improved or extended. There is shortage of milk most of the time and sometimes shortage of Nevirapine.

Only one VCT room and there are two counsellors, as a result they have to wait for each other to maintain privacy (Kwa chibi)

Building of a proper clinic because currently they are using municipality house (Kwa chibi)

More consulting rooms (Kwa zanele)

Improvement of the building (Slindile)

Infrastructure improvement (New scotland) (PR town)

Extension of facility (Evander)

Extend the building (Kinross)

Upgrading admission system (Embalenhle)

Clinic infrastructure needs improvement (Kempville) (Nthorwane)

Training of staff

Thirty one (31) clinic managers said they want their staff to attend training on most of the PMTCT courses offered.

Kwa chibi, Kwa zanele, Davel, Emthonjeni, MN Cindi, Breyton, Ermelo hosp, Slindile, Secunda, Bethal hosp, Evander, Kinross, Evander hosp, Embalenhle, Leandra, Sead, Bethal town, First Street, Trichard, Sakhile, Morgenzon, Bulfour, Greyling, Siyathemba, Nthorwane, Kempville, Driefontein old, Driefontein new, Amsterdam, Derby, Entombe

Traning on dual therapy, (Pix)

More workshops or inservice training (Vlakplaas, AL)

Training for all staff for all programmes entailed in PMTCT. Co-ordinators to update nurses in the clinics at all times (Mooiplaas, AL)

Training on PCR (Dundonald, ALCHC)

General staff including cleaners need to be informed of PMTCT. Training of staff. A staff member to deal with youth. Only one such staff (youth counsellor) arrantly available. (Pix)

Provision of Guidelines

Some clinics still do not have some protocols and guidelines and would appreciate it if they given to them.

Protocol for HIV positive women delivery (Bethal hosp)

Provide PMTCT guidelines (Breyton) (Bulfour)

Additional staff

The following 20 clinics said they would appreciate additional nurses and lay counselors

Kwa chibi, Kwa zanele, Davel, Emthonjeni, MN Cindi, Breyton, Ermelo hosp, Slindile, Secunda, Bethal hosp, Evander, Kinross, Evander hosp, Leandra, Sakhile, Morgenzon, Grootvlei, Siyathemba, Bulfour, Thanda

*More professional nurses to be employed (Haartebeeskop, AL)
Employment of all categories in the clinic (Mooiplaas, AL)
More staff needed especially enrolled nurse (Glenmore, AL)
More Staff, LCs on permanent payroll. (Tjakastad, AL)
Another LC, a male, (Eerstehoek, AL)*

Improve stocks

Stocks and supplies

Many indicated the importance of regular supply of infant formula, but also availability of stock and equipment.

*Get AZT in stock (AL)
Milk should be supplied monthly (AL)
Regular supply of formula (AL)
To have test kits and contraception in maternity ward, at the moment the test kits are kept by the laycounsellors and they do not work on weekends. Drugs are kept in the pharmacy (Pix Hos)*

*Embalenhle – milk
Leandra – milk & PCR
Bethal – milk
Stanwest – milk
Mispel – milk
First street – milk
Msimango – milk
Nthorwane - milk
Dirkiesdorp – milk*

Provision of Computers or electronics

*Siyathemba needs a computer
PR town needs ordinary clinic equipment*

Improve on clients

Community awareness on PMTCT

A number of clinics mentioned the need for increased community awareness about PMTCT.

*Emphasise importance of PMTCT to the community as a whole.(AL)
Educating the mothers more about HIV. Training more people to give health talks during ANC visits (AL)
Booklets/ to give to clients pamphlets or leaflets. (Pix)
Clients receiving CT are under the impression that staff know their status even before HIV test.
Causes client anxiety, that is a challenge for staff to deal with. Post - test positive mothers need*

extensive post test counselling and reassurances. " Re-assure them that this is not the end of the world". (Pix)

Would like to involve youth in PMTCT and other HIV activities (Pix)

Awareness days about PMTCT to the community more especially to teenagers. (Pix)

Establishment of clinic committee. The clinic has tried twice but failed because people are expecting payment.(Pix)

Establish support groups

A need to establish support groups was expressed.

Support groups of positive mothers to be established (Pix Hos)

PMTCT Indicators

1. INTRODUCTION

This is the report for the rapid baseline assessment that was conducted in the 7 sub-districts of Gert Sibande District between the period of May 2008 and January 2009. The report outlines just one part of the assessment i.e. the indicator results for the seven sub-districts. A total of 75 facilities were visited in the following sub-districts: Msukaligwa, Goven Mbeki, Mkhondo, Dipaleseng, Albert Luthuli, Pixley KaSeme and Lekwa. The table below shows the names of the facilities visited in each of the five sub-districts.

No	Albert Luthuli Sub-district	Mkhondo Sub-district	Goven Mbeki sub-district	Msukaligwa sub-district	Pixley KaSeme sub-district	Lekwa sub-district	Dipales sub-dis
1	Eerstehoek clinic	Amsterdam clinic	Secunda clinic	MN Cindi clinic	Vukuzakhe clinic	Standerton hospital	Balfour clinic
2	Kromdraai clinic	Derby clinic	Evander clinic	Davel clinic	Wakkerstroom clinic	Mis-pel	Ntoroan
3	Vlakplaas clinic	Driefontein new stand clinic	Kinross clinic	Ermelo TLC	Perdekop CHC	Morgenzon clinic	Greyling
4	Mooiplaas clinic	Dirklesdorp clinic	Embalenhle clinic	Emthonjeni clinic	Volksrust clinic	Sakhile CHC	Grootvie
5	Nhlazatshe no. 4 clinic	Dreifontein old stand clinic	Trichardt clinic	Bryeten clinic	Amajuba Hospital	Church street clinic	Siyather clinic
6	Nhlazatshe no. 6 clinic	Iswepe clinic	Leandra clinic	Kwa-Zanele clinic	Elsie Ballot	MS Msimango	
7	Tjakastad clinic	Ngema clinic	Bethal Town clinic	Kwa-Chibikhulu clinic	Amersfoort clinic	Stanwest clinic	
8	Badplaas CHC clinic	Ntombe clinic	First street clinic	New Scotland clinic	Daggakraal CHC		
9	Haartebeeskop clinic	Kempville clinic	Sead clinic	Silindile clinic	Ezamokuhle clinic		
10	Bettysgoed clinic	Thandukukhanya clinic	Evander hospital	Ermelo hospital			
11	Glenmore clinic	Mkhondo Town clinic	Bethal hospital				
12	Swallownest clinic	Piet Retief hospital					
13	Dundonald clinic						
14	Mayflower						

No	Albert Luthuli Sub-district	Mkhondo Sub-district	Govan Mbeki sub-district	Msukaligwa sub-district	Pixley KaSeme sub-district	Lekwa sub-district	Dipales sub-district
15	Fernie 1 clinic						
16	Fernie 2 clinic						
17	Diepdale clinic						
18	Carolinea Town Clinic						
19	Carolina Hospital						
20	Slovela clinic						
21	Embuleni Hospital						

2. METHODOLOGY

Prior to the clinic visits, appointments were made with the HAST coordinators for the seven (7) sub-districts. The HAST coordinators informed the sisters in charge of the various clinics about the PMTCT rapid baseline assessment. About three HSRC researchers conducted the interviews with the sisters in charge in the above 75 facilities. Confidentiality issues were explained and the sister in charge was requested to give informed consent before the interview proceeded.

As part of the PMTCT assessment, data was collected from the Case Registers (CR) in the health care facilities using a tool that was developed with data elements for the PMTCT programme. A Professional Nurse (PN) who is in charge of the PMTCT programme was requested to provide the researchers with all the registers that has PMTCT data, and monthly Summary Sheets (SS). The district information manager was also requested to provide DHIS data for the period assessed. Using the data elements, patient counts were done by the researcher and professional nurse for the month that was being assessed. Below are some of the PMTCT registers that were perused in order to get the monthly figures for the indicators: PMTCT register, tick register, drug register, PCR register, and CD4 count register etc. In order to check data reliability and validity, the information obtained from the case registers was compared with the information recorded on the monthly summary sheet and DHIS.

3. INTERPRETATION OF THE INDICATOR RESULTS OBTAINED FROM THE CASE REGISTERS AND THE MONTHLY SUMMARY SHEET PER FACILITY

3.1 PMTCT INDICATORS AND DATA ELEMENTS FOR MSUKALIGWA SUB-DISTRICT

Msukaligwa sub-district has a total of 9 PMTCT clinics and 1 hospital. Table 1-3 below shows data that was captured for the following indicators: ANC & PNC, Maternity indicators and infant indicators. The data elements presented in different tables throughout this document also include data from DHIS on the following indicators: number of 1st ANC visit, number of HIV+ women with CD4 results and number of HIV+ women receiving ART. The DHIS data received did not reflect maternity and infants indicators.

Table 1 below shows the data elements¹ that are recorded in the ANC & PNC indicators for the period of October 2008 in Msukaligwa sub-district:

	ERMALO TLC	SILINDILE	ERMALO HOSPITAL	ERMALO CLINIC	KWA-ZANELE	ERMALO CLINIC	ERMALO CLINIC	ERMALO CLINIC	KWA-ZANELE	ERMALO CLINIC
1. ANC & PNC	1	2	3	4	5	6	7	8	9	10
(1) No. of 1 st ANC visit	39{37} 80	22{33} 33	165{18 9}	12{16} 14	0{18} 12	39{47} 67	5{13} 12	61{72} 0	7 10	1{1} 0
(2) No. women counselled for VCT (pre-test counselled)	39{0}	22{20}		12{12}	0{0}	39{47}	5{12}	61{70}	8	1{1}
(3) No. ANC tested for HIV	39{38}	21{16}		12{12}	0{23}	39{31}	5{12}	61{60}	7	1{4}
(5) No. of women testing positive	14{15}	8{8}		4{4}	0{6}	10{12}	2{7}	17{15}	3	1{1}
(6) No. women retested	0{0}	0		0{0}	0{0}	0{0}	1{0}	3{0}	3	0
(7) No. women testing positive on retest	0{0}	0		0{0}	0{0}	0{0}	0{0}	0{0}	3	0
(8) No. of HIV positive women with CD4 result	0{0} 0	0 0		2{0} 0	0{0} 0	0{0} 0	0{0} 0	0{38} 0	0 0	
(9) No. of HIV positive women receiving ART	0{0} 0	0		0{0} 0	0{0} 0	0{0} 0	9{0} 0	0{2} 0	0	
(10) No. HIV positive women with CD4 cell count under ≤200	3{0}	0		2{0}	0{0}	0{0}	5{0}	0{2}	0	
(11) No. AZT courses dispensed to pregnant women at ANC	0{0}	0	0	0{0}	0{0}	0{0}	0{0}	0{0}	0	
(12) No. of NVP tablets dispensed to pregnant women at ANC	12{12}	7{6}	6{6}	0{6}	8{8}	5{6}	2{3}	11{10}	1	
(13) No. pregnant women receiving prophylaxis – bactrim	0{0}	0	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0	

3.1.1 ANC AND PNC INDICATORS

Below is the interpretation for the indicator results shown on **Table 1**.

No. of 1st ANC visit

In all Msukaligwa facilities, data recorded on the CR for the 1st ANC visit does not tally with data recorded on the monthly SS and the DHIS. For instance, MN Cindi clinic has 61 1st ANC visit recorded on the CR, 72 on the monthly SS and DHIS has recorded 0. Kwa-Zanele has not

¹ The first figure represents the data that was obtained from the case registers (CR) and the two figures in parentheses one represents data obtained from the monthly summary sheets (SS) and the other one data from DHIS. The data elements highlighted in red are those that do not tally i.e. data from CR do not tally with data recorded on the monthly SS and DHIS.

recorded 1st ANC visits in the CR but they have recorded 18 on the monthly SS and the DHIS shows 12 patients recorded.

No. women counselled for VCT

In terms of the women counselled for VCT, Breyten, Kwa-Zanele and New Scotland clinics have recorded data correctly because they have similar figures recorded in both CR and monthly SS. The rest of the facilities (Ermelo TLC, Silindile, Emthonjeni, Davel, MNCindi, and KwaChibikhulu) have recorded data that does not tally on both CR and monthly SS.

Number of ANC tested for HIV

In terms of the number of ANC who tested for HIV, Breyten clinic has captured data accurately because they have recorded 12 clients in the CR and 12 in the SS. All the remaining clinics have recorded data incorrectly in both the CR and SS.

No of women tested for HIV

Kwa- Zanele has recorded data very poorly because in the CR they have recorded 0 and in the SS they have recorded 23 clients.

No. of women testing positive

Almost all the clinics under recorded data in the CR and over recorded data in the monthly SS except for Silindile clinic (8/8), Breyten (4/4) and New Scotland (1/1).

No. of women re-tested

Ermelo TLC, Breyten, Kwa-Zanele and Emthonjeni have recorded accurate data in both the CR and SS i.e. they have recorded 0 in both CR and SS, indicating that women did not retest in the month of October 2008.

No of women testing positive on retest

All the facilities have recorded 0 in both the CR and the monthly SS except for Kwa-Chibikhulu with 3 clients only recorded on the CR.

No of HIV positive women with CD4 result

MNCindi clinic has over recorded data in monthly SS with 38 and 0 in both the CR and DHIS. Breyten clinic has recorded 2 patients in the CR and there is 0 in both the SS and DHIS data. The remaining facilities do not have data on this.

No of HIV positive women receiving ART

All the facilities have recorded 0 in the CR, monthly SS and DHIS except for Davel clinic which has over recorded in the monthly SS.

No of HIV+ women with CD4 cell count under 200

Ermelo TLC, Breyten and Davel clinics have over recorded data in the CR and they have recorded 0 in the SS.

No. of AZT courses dispensed to pregnant women at ANC

All the facilities have 0 records in both CR and monthly SS.

No. of NVP tablets dispensed to pregnant women at ANC

The data on the issuing of NVP tablets only tallies in Ermelo TLC, Ermelo Hospital and Kwa-Zanele facilities. The rest of the data recorded in other facilities does not tally.

No. of pregnant women receiving prophylaxis-bactrim

There is no data in all the facilities on this.

3.1.2 MATERNITY INDICATORS

Table 2 below shows the data elements that are recorded in maternity indicators for the period of October 2008 in Msukaligwa sub-district:

	ERMETO TLC	SUNDILE	ERMETO	ERMETO	ERMETO	ERMETO	ERMETO	ERMETO	ERMETO	ERMETO
2. Maternity	1	2	3	4	5	6	7	8	9	10
(1) No. women established positive (at delivery)			64{39}							
(2) No. women on ART at delivery			0{0}							
(3) No. women on AZT > 4weeks			0{0}							
(4) No. women on AZT <4weeks			0{0}							
(5) No. of sdNVP tablets issued in labour ward			6{6}							
(6) No. of infants given NVP and AZT			49{39}							
(7) No. HIV positive mothers choosing to formula feed			19{24}							
(8) Live births to women with HIV			55{39}							
(9) No of family planning issued postpartum			3{0}							

Table 2: Maternity indicators

Table 2 above shows that only Ermelo hospital has recorded data on maternity indicators. The data elements that are recorded in the CR do not tally with the data recorded in the monthly SS. For instance, the number of women established positive at delivery, 64 patients were recorded in the CR and 39 in the monthly SS. On the number of infants who received NVP and AZT, they have over recorded 49 infants in the CR and 39 in the SS. However, there is tallying data on the following indicators: number of women at ART delivery (0/0), number of women on AZT>4 weeks and over 4 weeks (0/0), number of sdNVP tablets issued in labour ward (6/6).

3.1.3 INFANT INDICATORS

Table 3 below shows the data elements that are recorded on Infant Indicators for the period of October 2008 in Msukaligwa sub-district:

The results for **Table 3** are interpreted as follows:

	ERMETO TLC	SILINDILE	ERMETO TLC	ERMETO TLC	ERMETO TLC	ERMETO TLC	ERMETO TLC	ERMETO TLC	ERMETO TLC	ERMETO TLC
2. Infants	1	2	3	4	5	6	7	8	9	10
(1) No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit	0{0}	6		0{0}	0{0}	0{0}	0{0}	0{4}	0	4
(2) No. PCR tests done by the six week immunisation visit	0{0}	6		0{0}	0{0}	3{5}	10{0}	12{12}	0	1
(3) No. PCR tests positive at EPI clinic	0{0}	1		0{0}	0{0}	0{0}	2{0}	2{2}	0	0
(4) No. PCR tests given to mothers at EPI clinic	0{0}	0		0{0}	0{0}	0{0}	10{0}	0{0}	0	0
(5) No. mothers established positive	0{0}	0		0{0}	0{0}	0{0}	0{0}	12{0}	0	
(6) No. mothers established negative	0{0}	0		0{0}	0{0}	0{0}	0{0}	0{0}		
(7) No. of HIV exposed infants exclusively formula fed	0{0}	0		5{3}	0{0}	27{27}	15{8}	7{8}		3
(8) No. of HIV exposed infants exclusively breast fed	0{0}	0		0{10}	0{0}	10{19}	0{0}	6{0}		2
(9) No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)	0{0}	0		0{0}	0{0}	0{0}	0{0}	0{0}		
(10) No. infants referred to ART site	0{0}	0		0{0}	0{0}	0{0}	1{0}	0{0}		

No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit

Ermelo TLC, Breyten, Kwa-Zanele, Davel and Kwa-Chibikhulu have 0 records in both the CR and the monthly SS. Silindile and New Scotland have recorded data on in the CR and nothing in the SS. MNCindi has under recorded in the CR.

No. PCR tests done by the six week immunisation visit

Only MNCindi has recorded data that tallies in both the CR and the monthly SS. Ermelo TLC, Breyten, Kwa-Zanele have 0 records in both the CR and the monthly SS. Emthonjeni has under recorded data in the CR and Davel has over recorded data in the monthly SS.

No. PCR tests positive at EPI clinic

Only Silindile and Davel clinic have recorded inaccurate data for both CR and monthly SS. MNCindi has recorded tallying data for both CR and the monthly SS.

No. PCR tests given to mothers at EPI clinic

All the clinics have recorded 0 data in both the CR and monthly SS except for Davel clinic which has recorded 10 in only the CR.

No. mothers established positive

All the clinics have recorded 0 data in both the CR and the monthly SS except for MNCindi clinic which has recorded 12 in the CR only.

No. mothers established negative

All the clinics have recorded 0 data in the CR and some have no records on the monthly SS.

No. of HIV exposed infants exclusively formula fed

Only Emthonjeni clinic has recorded accurate data for both the CR and monthly SS. The remaining facilities have under recorded or over recorded in both the CR and monthly SS.

No. of HIV exposed infants exclusively breast fed

Ermelo TLC, Kwa-Zanele and Davel have 0 records in both the CR and monthly SS. Breyten and Emthonjeni clinic have over recorded data in the SS.

No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)

Kwa-Chibikhulu and New Scotland have no data in both the CR and SS. The remaining facilities have recorded 0 in both the CR and SS.

No. infants referred to ART site

Only Davel clinic has referred one infant to the ART site but they did not record data in the monthly SS. The remaining facilities have recorded 0 in both the CR and SS.

3.2 PMTCT INDICATORS AND DATA ELEMENTS FOR MKHONDO SUB-DISTRICT

Mkhondo sub-district has a total of 11 clinics and 1 hospital. Table 4-6 below shows the data that is recorded in the following indicators: ANC & PNC, Maternity indicators and infant indicators for the period of November/ December 2008:

Table 4 below shows the data elements that are recorded in the ANC & PNC indicators for Mkhondo sub-district:

1. ANC											
(1) No. of 1 st ANC visit	12{10} 11	17{58} 12	32{43} 28	11{13} 12	6{6} 23	60{60} 37	34{52} 38	36{31} 32	9{10} 14	33{23} 110	21{28} 30
(2) No. women counselled for VCT (pre-test counselled)	12{10}	17{58}	32{43}	11{13}	6{6}	60{60}	34{52}	36{36}	9{10}	33{23}	21{28}
(3) No. ANC tested for HIV	12{10}	17{50}	32{14}	11{13}	6{6}	60{53}	34{52}	30{30}	9{10}	33{23}	21{18}
(5) No. of women testing positive	5{2}	6{9}	5{14}	4{4}	4{4}	24{21}	19{43}	11{15}	2{3}	21{12}	8{9}
(6) No. women retested	0{0}	0{0}	27{13}	0{0}	2{2}	21{0}	0{0}	0{0}	0{0}	0{5}	0{1}
(7) No. women testing positive on retest	0{0}	0	0{13}	0{0}	2{2}	13{0}	0{0}	0{0}	0{0}	0{5}	0{0}
(8) No. of HIV positive women with CD4 result	0{0} 1	0{9} 12	6{8} 13	1{4} 3	0{4} 4	13{9} 21	0{43} 19	0{15} 28	0{3} 0	0{12} 16	0{0} 15
(9) No. of HIV positive women receiving ART	0{0}	0 7	0	0{0} 0	0{0} 0	0{0} 0	0{0} 0	0{0} 0	0{0} 0	0{0} 0	0{9} 0
(10) No. HIV positive women with CD4 cell count under ≤200	0{2}	0{0}	0{0}	0{0}	0{0}	3{0}	0{0}	0{0}	0	0{0}	0{0}
(11) No. AZT courses dispensed to pregnant women at ANC	0{0}	0	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}
(12) No. of NVP tablets dispensed to pregnant women at ANC	0{2}	7{9}	12{14}	0{0}	4{3}	13{16}	12{13}	9{6}	0{0}	12{4}	0{10}
(13) No. pregnant women receiving prophylaxis – bactrim	0{0}	7{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}

3.2.1 ANC AND PNC INDICATORS

No. of 1st ANC visit

Data recorded in the CR, monthly SS and DHIS for almost all the clinics is not accurate. Data recorded on the CR and monthly SS for Derby (6/6) and Amsterdam clinic (60/60) tallies but it has been under recorded in the DHIS records. The remaining clinics have also either over recorded or under recorded in the CR, the monthly SS and DHIS. Piet Retief Hospital has no data on this.

No. women counselled for VCT

Out of the 12 facilities, only Derby (6/6), Amsterdam (60/60) and Iswepe clinic (36/36) have data that is accurate for both the CR and the monthly SS. The remaining clinics have either over recorded or under recorded in both the CR and the monthly SS. Piet Retief Hospital has no data on this.

Number of ANC tested for HIV

Derby and Iswepe have accurate data in both the CR and the SS, the remaining clinics have either over recorded or under recorded in both the CR and the monthly SS. Piet Retief Hospital has no data on this.

No. of women testing positive

Ntombe and Iswepe clinic (4/4) have accurate figures for the CR and the monthly SS. The remaining clinics have either over recorded or under recorded in both the CR and the monthly SS. Piet Retief Hospital has no data on this.

No. of women re-tested

Dirkiesdorp, KwaNgema, Ntombe, Ethandokukhanya, Iswepe, Driefontein Old stand clinics have 0 records in both the CR and monthly SS and Derby clinic has recorded 2/2 in both the CR and SS. Driefontein New stand, Town clinic, Kempville, and Amsterdam have over recorded or under recorded in both the CR and the monthly SS. Piet Retief Hospital has no data on this.

No of women testing positive on re-test

Almost all the facilities have 0 data in both the CR and monthly SS except for Derby clinic which has recorded 2 clients in both the CR and SS. Kempville, Amsterdam and Driefontein New stand have over recorded or under recorded in both the CR and the monthly SS. Piet Retief Hospital has no data on this.

No of HIV positive women with CD4 result

Only Derby clinic has data that tally in both the monthly SS and the DHIS. The remaining facilities have either over recorded or under recorded in all the three data capturing systems. Piet Retief Hospital has no data on this.

No of HIV positive women receiving ART

Almost all the clinics have 0 records for this except for Kwa-ngema and Derby clinic. Data has been over recorded in the DHIS. Piet Retief Hospital has no data on this.

No of HIV+ women with CD4 cell count under 200

Amsterdam and Dirkiesdorp clinic have either over recorded or under recorded in both the CR and the monthly. The remaining facilities have recorded 0 in both the CR and the monthly SS but Piet Retief Hospital has no data on this.

No. of AZT courses dispensed to pregnant women at ANC

There are 0 records in all the facilities. Piet Retief Hospital has no data on this.

No. of NVP tablets dispensed to pregnant women at ANC

The issuing of nevirapine has been over recorded or under recorded in the CR and the monthly SS in almost all the facilities. Ntombi and Driefontein old stand has recorded 0 in both CR and SS. Piet Retief Hospital has no data on this.

No. of pregnant women receiving prophylaxis-bactrim

Almost all the clinics have 0 records on both CR and monthly SS except for Kwa-Ngema clinic which has over recorded in the CR and under recorded in the SS. Piet Retief Hospital has no data on this.

3.2.2 MATERNITY INDICATORS

Table 5 below shows the data elements that are recorded in maternity indicators for Mkhondo sub-district:

(1) No. women established positive (at delivery)						3					4	0{65}
(2) No. women on ART at delivery						0					4	0{0}
(3) No. women on AZT > 4weeks						0					0	0{0}
(4) No. women on AZT <4weeks						0					0	0{0}
(5) No. of sdNVP tablets issued in labour ward						7					4	22{14}
(6) No. of infants given NVP and AZT						0					4	35{61}
(7) No. HIV positive mothers choosing to formula feed						2					0	8{0}
(8) Live births to women with HIV						7{3}					4	0{0}
(9) No of family planning issued postpartum						0{0}						0{0}

Table 5 above shows that only Amsterdam, Driefontein new stand and Piet Retief hospital have recorded data on maternity indicators. The data elements that are recorded in the maternity indicators do not tally at all in these facilities. It is only a few cases whereby Piet Retief hospital and Amsterdam clinic have zero tallies for both CR and SS.

3.2.3 INFANT INDICATORS

Table 6 below shows the data elements that are recorded on infant indicators for the Mkhondo sub-district:

(1) No. of HIV positive mothers presenting at EPI (Expanded programme on Immunisation) clinic at the six week visit	0{0}	2{2}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	
(2) No. PCR tests done by the six week immunisation visit	0{0}	2{2}	1{0}	0{0}	3{3}	2{3}	0{1}	0{1}	1{1}	1{4}	2{0}	
(3) No. PCR tests positive at EPI clinic	0{0}	1{1}	0{0}	0{0}	3{3}	0{0}	0{1}	0{0}	0{0}	0{0}	0{0}	
(4) No. PCR tests given to mothers at EPI clinic	0{0}	0	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}			
(5) No. mothers established positive	0{0}	3	0{0}	0{0}	0{0}	0{0}	0{0}	12{0}	0{0}			
(6) No. mothers established negative	0{0}	0	0	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}		0{0}	
(7) No. of HIV exposed infants exclusively formula fed	5{0}	0	3	10{0}	14{0}	8{0}	0	0{0}	14{0}	4{0}	0{0}	
(8) No. of HIV exposed infants exclusively breast fed	0{0}	0	18	0{0}	0{0}	5{0}	0{0}	0{0}	0{0}	0{0}	0{0}	
(9) No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)	0{0}	0	0	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	
(10) No. infants referred to ART site	0{0}	0	0	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	0{0}	

No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit

Table 5 above shows that all the facilities have recorded 0 in both the CR and the monthly SS. However, Kwa-Ngema clinic (2/2) has recorded data that tallies in both the CR and SS. Piet Retief hospital has no data on this.

No. PCR tests done by the six week immunisation visit

Only Kwa-Ngema (2/2), Derby clinic (3/3), Dirkiesdorp and Ntombe clinic (0/0) have recorded data that tallies in both the CR and SS. Other facilities have either over recorded or under recorded in both the CR and SS. Piet Retief hospital has no data on this.

No. PCR tests positive at EPI clinic

Almost all the facilities have tallying data in both the CR and SS except for Ethandokukhanya which has recorded 0 in the CR and 1 in the monthly SS. Piet Retief hospital has no data on this.

No. PCR tests given to mothers at EPI clinic

Driefontein new stand, Town clinic and Piet Retief hospital have absolutely no data on this. Other facilities have recorded 0 in both the CR and SS.

No. mothers established positive

Dirkiesdorp, Kempville, Ntombe, Derby, Amsterdam, Ethandokukhanya and Driefontein old stand clinics have recorded 0 in both CR and SS. Kwa-Ngema did not record data in the monthly SS. Iswepe clinic has recorded 12 in the CR and 0 in the SS. Driefontein new stand, Town and Piet Retief hospital have absolutely no data on this.

No. mothers established negative

All the facilities have recorded 0 on this except for Driefontein new stand clinic and Piet Retief hospital who have absolutely no data on this.

No. of HIV exposed infants exclusively formula fed

Ntombe (10/0), Derby (14/0) and Driefontein old stand (14/0) have extremely over recorded data in the CR and have 0 records in the monthly SS. Only Iswepe and Town clinic have recorded 0 in both the CR and SS. Piet Retief hospital has absolutely no data on this.

No. of HIV exposed infants exclusively breast fed

All the facilities have recorded 0 in both the CR and monthly SS except for Kempville clinic which has only recorded 18 in the CR and nothing in the SS and Amsterdam 5 in the CR and 0 in the SS. Piet Retief hospital has absolutely no data on this.

No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)

All the facilities have recorded 0 in both the CR and SS. Piet Retief hospital has absolutely no data on this.

No. Infants referred to ART site

All the facilities have recorded 0 in both the CR and SS.

3.3 PMTCT INDICATORS AND DATA ELEMENTS FOR GOVAN MBEKI SUB-DISTRICT

Govan Mbeki sub-district has a total of 9 clinics and 2 hospitals. Table 7-9 below will show the data that was captured for the following indicators: ANC & PNC, Maternity indicators and infant indicators for the period of November/ December 2008. Table 7 below shows the data elements that are recorded in the ANC & PNC indicators for Govan Mbeki sub-district:

Table 7: ANC & PNC Indicators

Indicator	Nov 08	Dec 08	Nov 08	Dec 08	Nov 08	Dec 08	Nov 08	Dec 08	Nov 08	Dec 08
(1) No. of 1 st ANC visit	32{26} 33	21{21} 33	13{13} 19	12{20} 31		72{104} 98	36{73} 56	44{57} 3	20{-} 12	
(2) No. women counselled for VCT (pre-test counselled)	32	20{20}	12{13}	12{20}		72{104}	36{58}	44{57}	20	
(3) No. ANC tested for HIV	27{26}	20{35}	12{11}	12{24}		72{52}	28{36}	44{35}	17	
(5) No. of women testing positive	9{7}	6{11}	4{3}	5{7}		29{22}	8{9}	14{11}	7	
(6) No. women retested			0			135	0{0}	40	0	
(7) No. women testing positive on retest			0			56	0{0}	12	0	
(8) No. of HIV positive women with CD4 result	14 DHIS	6{0}0	4 {-} 6	4 DHIS		0 {-} 13	0{16} 4	3DHIS	5 {-} 10	
(9) No. of HIV positive women receiving ART			0			56 {0} 0				
(10) No. HIV positive women with CD4 cell count under ≤200			0			0				
(11) No. AZT courses dispensed to pregnant women at ANC			0			0				
(12) No. of NVP tablets dispensed to pregnant women at ANC	8{0}	8{8}	3{3}	4{5}		8{7}	5{5}	1		
(13) No. pregnant women receiving prophylaxis – bactrim			0	5{0}		29		23		

3.3.1 ANC & PNC INDICATORS

No. of 1st ANC visit

The above table 7 illustrate the high level of inaccuracy in data recording for most of the Govan Mbeki facilities. This is clearly shown in Embalenhle CHC that has under recorded data in the CR

with 72 1st ANC's and over recorded data that does not even tally in both the monthly SS and DHIS (104/98), it is followed by Leandra (36/73/56), Secunda (44/57/3), Sead (32/26/33) and Evander clinics (26/31/44). First street clinic has only recorded data in the CR but not in the monthly summary SS, but surprisingly there is data recorded in the DHIS. Only Bethal and Trichart clinics have recorded accurate data in both CR and SS but still it does not tally with the DHIS data. There is no data on this for both Bethal and Evander hospitals.

No. women counselled for VCT

Most clinics have over recorded data in the SS and Embalenhle is leading with 72 patients in the CR and 104 in the SS. Only Bethal clinic (20/20) has recorded accurate information. There is no data on this for both Bethal and Evander hospitals.

Number of ANC tested for HIV

Data recorded in all the facilities is not accurate. There is no data on this for both Bethal and Evander hospitals.

No. of women testing positive

Data recorded in all the facilities is not accurate. There is no data for both Bethal and Evander hospitals.

No. of women retested

Embalenhle and Secunda clinics have both recorded data in CR but not in the monthly SS. Only Leandra clinic (0/0) has tallying data in both the CR and SS. There is no data in the rest of the facilities.

No of women testing positive on retest

Embalenhle and Secunda clinics have both recorded data in CR but not in the monthly SS. Only Leandra clinic (0/0) has tallying data in both the CR and SS. There is no data in the rest of the facilities.

No of HIV positive women with CD4 result

The above table 7 shows that Sead, Kinross and Secunda clinics have data that is only recorded in the DHIS but not in the CR and monthly SS. Bethal town clinic has similar data for both monthly SS and DHIS but has over recorded data in the CR. Leandre CHC has under recorded data in the CR, over recorded in the monthly SS and under recorded in the DHIS. Trichart, First and Evander clinics did not record data in the monthly SS but they have different figures recorded in both CR DHIS.

No of HIV positive women receiving ART

Only Embalenhle CHC has recorded data in the CR and not in the monthly SS. All the other facilities have not recorded data at all on this. DHIS has 0 records for all the facilities including Embalenhle CHC.

No of HIV+ women with CD4 cell count under 200

Trichart and Embalenhle clinics have recorded 0 only in the CR, and Evander 1 only in the CR. There is no data recorded in the rest of the facilities.

No. of AZT courses dispensed to pregnant women at ANC

There is no data in all the facilities.

No. of NVP tablets dispensed to pregnant women at ANC

Only Bethal clinic, Trichart and Leandra clinic have recorded accurate data in both the CR and the monthly SS. The rest of the facilities have either under recorded or over recorded in both CR and SS or have recorded the information in the CR only. Evander and Bethal hospital and First clinic do not have data on this.

No. of pregnant women receiving prophylaxis-bactrim

Only Kinross, Embalenhle, Trichart, Evander and Secunda clinics have recorded data in the CR on this. The rest of the facilities do not have data on this.

3.3.2 MATERNITY INDICATORS

Table 8 below shows the data elements that are recorded in maternity indicators for Govan Mbeki. The data for this section has only been completed by Evander hospital, Embalenhle, Leandra clinic and Bethal hospital. The rest of the facilities do not have data on this.

Table8: Maternity indicators

	1	2	3	4	5	6	7	8	9	10	11
2. MATERNITY	1	2	3	4	5	6	7	8	9	10	11
(1) No. women established positive (at delivery)					13	15	1				
(2) No. women on ART at delivery					0	0					
(3) No. women on AZT > 4weeks					0	0					
(4) No. women on AZT <4weeks					0	0					
(5) No. of sdNVP tablets issued in labour ward					0	15	1{4}				
(6) No. of infants given NVP and AZT					0	15	2{2}				
(7) No. HIV positive mothers choosing to formula feed						10{17}	1			0	
(8) Live births to women with HIV						15{7}	2 {2}			25	
(9) No of family planning issued postpartum						0	0			0	

When looking at the maternity indicators, the four facilities that have recorded data on this only recorded data in the CR and not in the SS. Those that have recorded in both (like Evander hospital, Embalenhle and Leandra clinic) have either under recorded or over recorded in both the CR and SS and vice versa. It is only on the number of infants given NVP and AZT whereby Leandra clinic (2/2) has managed to record accurate data. It has also recorded accurate data on the number of live births to women with HIV.

3.3.3 INFANT INDICATORS

Table 9 below shows the data elements that are recorded on infant indicators for the Goven Mbeki sub-district:

Table 9: Infant Indicators

2. INFANT	1	2	3	4	5	6	7	8	9	10	11
(1) No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit			0	5{2}	5{2}	10		4			0
(2) No. PCR tests done by the six week immunisation visit	2{1}	1	0	3{2}	3{2}	10	2{2}	4			3{4}
(3) No. PCR tests positive at EPI clinic	0		0			1	{1}				0{0}
(4) No. PCR tests given to mothers at EPI clinic			0			10					0
(5) No. mothers established positive			4			10					
(6) No. mothers established negative			7			0					
(7) No. of HIV exposed infants exclusively formula fed	5{0}	8	0			27{17}	9				
(8) No. of HIV exposed infants exclusively breast fed	4{0}		0			24{5}	1				
(9) No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)			0			0					
(10) No. infants referred to ART site		1	0	1		0					

Looking at the data elements recorded on the infant indicators for Goven Mbeki, it is very clear that the recorded data does not tally or is not accurate in both the CR and the monthly SS. It is only on the number of PCR done by the 6 weeks Immunisation visit whereby Leandra clinic has recorded 2 in both the CR and the monthly SS. Also Evander clinic has 0 records in both CR and SS for the number of PCR tests positive at EPI clinic. Table 9 shows lot of missing data by most of the facilities.

3.4 PMTCT INDICATORS AND DATA ELEMENTS FOR DIPALESENG SUB-DISTRICT

Dipaleseng sub-district has a total of 5 clinics. Table 10-12 below will show the data that was captured for the following indicators: ANC & PNC, Maternity indicators and infant indicators for the period of December 2008. Table 10 below shows the data elements that are recorded on the ANC & PNC indicators for Dipaleseng sub-district:

Table 10: ANC & PNC indicators

	Balfour	Siyathemba	Greylingstad	Grootvlei	Nitroane
1. ANC & PNC	1	2	3	4	5
(1) No. of 1 st ANC visit	25(25)20	36(104)12	3(7)10	8(12)22	0(7)3
(2) No. women counselled for VCT (pre-test counselled)	40(25)	2(104)	10(7)	14(12)	9(7)
(3) No. ANC tested for HIV	25(25)	36(104)	3(7)	10(12)	9(7)
(5) No. of women testing positive	9(9)	16(15)	3(2)	7(2)	0(4)
(6) No. women retested	0(0)	24(3)	0(0)	1(3)	0(2)
(7) No. women testing positive on retest	0(0)	13(0)	0(0)	1(0)	0(0)
(8) No. of HIV positive women with CD4 result	9(9)10	6(11)0	1(1)9	7(2)1	4(0)0
(9) No. of HIV positive women receiving ART	0	0	0(-)3	6DHIS	0(0)2
(10) No. HIV positive women with CD4 cell count under ≤200	3	0(0)	0		4(0)
(11) No. AZT courses dispensed to pregnant women at ANC	0(0)	2(1)	0	0(0)	0(0)
(12) No. of NVP tablets dispensed to pregnant women at ANC	0(0)	7(1)		(0)	0(0)
(13) No. pregnant women receiving prophylaxis – bactrim	0(0)				

3.4.1 ANC & PNC INDICATORS

No. of 1st ANC visit

Table 10 shows that Balfour clinic is the only one that has recorded accurate data in both the CR and the monthly SS but has different data recorded in the DHIS. The remaining clinics have over recorded in the monthly SS e.g. Siyathemba clinic (36/104) has recorded the highest number of 1st ANC visit in their monthly SS and not in the CR. The data recorded in the DHIS does not tally with the data recorded in the monthly SS.

No. women counselled for VCT

All the clinics have either over recorded or under recorded in both CR and SS and versa. Siyathemba clinic is still reflecting the highest number of women counselled for VCT in their monthly SS and not in the CR.

Number of ANC tested for HIV

Balfour clinic (25/25) is the only one that has accurate data on the number of ANC tested for HIV. The remaining clinics have over recorded some in the CR and some in the monthly SS e.g. Siyathemba clinic is once again leading (36/104) with the over recording in SS or under recording CR.

No. of women testing positive

Balfour clinic (9/9) is the only one that has accurate data on the number of women testing positive. The rest of the facilities have either over recorded or under recorded in both the CR and SS.

No. of women retested

Balfour and Greylingstad clinic have recorded 0 in both the CR and the SS. Siyathemba, Grootvlei and Ntoroane clinics have either over recorded or under recorded in both the CR and SS.

No of women testing positive on retest

Balfour and Greylingstad clinics have recorded 0 in the CR and the monthly SS. Siyathemba, Grootvlei and Ntoroane clinic have either over recorded or under recorded in both the CR and SS.

No of HIV positive women with CD4 result

Balfour (9/9) and Greylingstad (1/1) clinic have accurate data that tallies in both the CR and the monthly SS but not with the data recorded in the DHIS. Siyathemba, Grootvlei and Ntoroane clinic have either over recorded or under recorded in both the CR and SS and DHIS data does not tally with what they have.

No of HIV positive women receiving ART

Almost all the clinics have 0 records in the CR, only Ntoroane has 0 records for both CR and monthly SS, but 2 positive women has been recorded in the DHIS. Grootvlei clinic only has data recorded in the DHIS only but not in the CR and monthly SS.

No of HIV+ women with CD4 cell count under 200

Only Siyathemba clinic has accurate data for both CR and SS. The rest of the facilities have either under recorded or over recorded in both CR and CR and some do not have records at all (e.g. Grootvlei clinic)

No. of AZT courses dispensed to pregnant women at ANC

Balfour, Grootvlei and Ntoroane clinics have recorded 0 in both CR and SS. Siyathemba clinic (2/1) has under recorded in the monthly SS and Greylingstad clinic did not record in the SS.

No. of NVP tablets dispensed to pregnant women at ANC

Balfour and Ntoroane did not dispense NVP tablets, they both have recorded 0 in both the CR and the monthly SS. Siyathemba clinic (7/1) has under recorded in the monthly SS and Grootvlei clinic did not record data in the CR. Greylingstad has not recorded any data on this.

No. of pregnant women receiving prophylaxis-bactrim

Only Balfour clinic has recorded 0 in both the CR and the monthly SS. The remaining facilities did not record any data on this.

3.4. 2 MATERNITY INDICATORS

Table 11 below shows the data elements that are recorded in maternity indicators for Dipaleseng. The data for this section has only been completed by Siyathemba CHC, the rest of the facilities do not have data on this.

Table 11: Maternity indicators

	Balfour	Siyathemba	Greylingstad	Grootvlei	Nthorwane
1. MATERNITY	1	2	3	4	5
(1) No. women established positive (at delivery)					
(2) No. women on ART at delivery		4			
(3) No. women on AZT > 4weeks					
(4) No. women on AZT <4weeks					
(5) No. of sdNVP tablets issued in labour ward					
(6) No. of infants given NVP and AZT		7(1)			
(7) No. HIV positive mothers choosing to formula feed		0(7)			
(8) Live births to women with HIV		4(7)			
(9) No of family planning issued postpartum					

When looking at the maternity indicators on **Table 11**, Siyathemba CHC has under recorded and over recorded in both the CR and the SS. There is no data accuracy at all on this.

3.4.3 INFANT INDICATORS

Table 12 below shows the data elements that are recorded on infant indicators for the Govan Mbeki sub-district:

Table 12: Infant indicators

	Balfour	Siyathemba	Greylingstad	Grootvlei	Nthorwane
1. INFANT	1	2	3	4	5
(1) No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit	1	17	0	1	4(0)
(2) No. PCR tests done by the six week immunisation visit	1{1}	17{20}	0	1{0}	4{2}
(3) No. PCR tests positive at EPI clinic		3{2}	0	0{2}	1{2}
(4) No. PCR tests given to mothers at EPI clinic		3	0		4
(5) No. mothers established positive	0		3{2}	7	1
(6) No. mothers established negative	0		7	10	3
(7) No. of HIV exposed infants exclusively formula fed	1	50{7}	0		1
(8) No. of HIV exposed infants exclusively breast fed	0		0		0
(9) No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)	0		0		0
(10) No. infants referred to ART site	0	1	0		0

Looking at the data elements recorded on the infant indicators for Dipaleseng, it is very clear that the recorded data does not tally in both the CR and SS. It is only on the number of PCR done by the 6 weeks immunisation visit whereby Balfour clinic has recorded 1 in both the CR and the monthly SS. Also there is lot of data recorded only in the CR and not in the monthly SS. Table 12 shows a lot of missing data by most of the facilities.

3.5 PMTCT INDICATORS AND DATA ELEMENTS FOR LEKWA SUB-DISTRICT

Lekwa sub-district has a total of 5 clinics and 1 hospital. Table 13-15 below will show the data that was captured for the following indicators: ANC & PNC, Maternity indicators and infant indicators for the period of December 2008. **Table 13** below shows the data elements that are recorded on the ANC & PNC indicators for Lekwa sub-district:

Table 13: ANC & PNC Indicators

	MIPSEL	MS MSIMANGO	SAKHILE	MORGENZON	STANDERTON HOSPITAL	STANWEST	CHURCH STREET CLINIC
1. ANC & PNC	1	2	3	4	5	6	
(1) No. of 1 st ANC visit	31{31} 30	21 DHIS	12 (-) 31	3(-)46		21(-)22	11 DHIS
(2) No. women counselled for VCT (pre-test counselled)	37		47	{31}		52	
(3) No. ANC tested for HIV	28{44}		19	17{38}	{67}	52	
(5) No. of women testing positive	11{16}		14	4{13}	{36}	18	
(6) No. women retested	1			1{15}		18	
(7) No. women testing positive on retest	1			1{9}		18	
(8) No. of HIV positive women with CD4 result	69(-)7		14(-)7	7(-)8	{0}	26(-)0	
(9) No. of HIV positive women receiving ART	0(-)2		1(-)0	0			
(10) No. HIV positive women with CD4 cell count under ≤200	14		1	0		6	
(11) No. AZT courses dispensed to pregnant women at ANC	1			0			
(12) No. of NVP tablets dispensed to pregnant women at ANC	9{10}		6	3	{28}	8	
(13) No. pregnant women receiving prophylaxis – bactrim				0			

3.5.1 ANC & PNC INDICATORS

No. of 1st ANC visit

Table 13 shows that Mipsel clinic (31/31) is the only one that has recorded accurate data in both the CR and the monthly summary sheet but different data has been recorded in the DHIS. Sakhile, Morgenzon and Stanwest clinics have recorded data only in the CR and not in the monthly SS, and the data recorded in the DHIS does not tally with the one recorded in the CR. MS Msimango and Standerton hospital do not have data on this.

No. women counselled for VCT

Mispel, Sakhile and Stanwest clinics have only recorded data in the CR and not in the monthly SS. Morgenzon clinic has only recorded data in the monthly SS. MS Msimango and Standerton hospital do not have data on this.

Number of ANC tested for HIV

There is no accurate data in Mispel, Sakhile, Morgenzon, Stanwest clinic and Standerton hospital. They have either under recorded or over recorded on both the CR and monthly SS. MS Msimango has missing data in both CR and SS.

No. of women testing positive

There is no accurate data in Mispel, Sakhile, Morgenzon, Stanwest clinic and Standerton hospital. They have either under recorded or over recorded on both the CR and SS. MS Msimango has missing data in both CR and SS.

No. of women retested

There is no accurate data in Mispel, Morgenzon and Stanwest clinic. They have either under recorded or over recorded on both the CR and SS or they only recorded data in CR. MS Msimango, Sakhile, clinic and Standerton hospital has missing data on this.

No of women testing positive on retest

The data is not accurate in all the facilities. Morgenzon clinic has under recorded data in the CR, Mispel and Stanwest only recorded data in the CR and not in the monthly SS. There is no data at all for MS Msimango, Sakhile, and Standerton hospital.

No of HIV positive women with CD4 result

Mispel clinic has recorded only 69 women with CD4 results on the CR and nothing on the monthly SS but there are 7 positive women recorded in the DHIS. Sakhile, Morgenzon and Stanwest did the same, they did not record data in the monthly SS but there is data reflecting in the DHIS which is different from the CR. Standerton hospital has recorded 0 only in the SS. MS Msimango did not record any data on this.

No of HIV positive women receiving ART

There is only one record on the CR of a positive woman receiving ART in Sakhile clinic but nothing has been recorded in the monthly SS. The DHIS has also recorded 0 on this. Mispel and Morgenzon recorded 0 only in their CR and nothing in the SS. MS Msimango, Stanwest clinic and Standerton hospital did not record any data on this, therefore on this DHIS this is reflected as 0.

No of HIV+ women with CD4 cell count under 200

Most of the clinics only recorded data in the CR and not in the SS and some have missing data on this.

No. of AZT courses dispensed to pregnant women at ANC

Only Mispel clinic has dispensed AZT to 1 client and it is only recorded in the CR. Morgenzon recorded 0 in their CR.

No. of NVP tablets dispensed to pregnant women at ANC

The data in most of the facilities is not accurate, it shows under recording in the CR (e.g. Mispel), data recorded only in CR (Sakhile, Morgenzon, Stanwest clinic) and data recorded only on the monthly SS (Standerton hospital).

No. of pregnant women receiving prophylaxis-bactrim

Only Morgenzon clinic has recorded 0 in their CR. The rest of the clinics did not record any data on this.

3.5.2 MATERNITY INDICATORS

Table 14 below shows the data elements that are recorded in maternity indicators for Lekwa. The data for this section has only been completed by Morgenzon clinic, the rest of the facilities do not have data on this.

Table 14: Maternity Indicators

	MISPEL	MS MSIMANGO	SAKHILE	MORGENZON	STANDERT ON HOSPITAL	STANWEST	CHURCH CLINIC
1. MATERNITY	1	2	3	4	5	6	
(1) No. women established positive (at delivery)							
(2) No. women on ART at delivery							
(3) No. women on AZT > 4weeks							
(4) No. women on AZT <4weeks							
(5) No. of sdNVP tablets issued in labour ward							
(6) No. of infants given NVP and AZT							
(7) No. HIV positive mothers choosing to formula feed				5			
(8) Live births to women with HIV							
(9) No of family planning issued postpartum							

When looking at the maternity indicators on table 14, Morgenzon clinic is the only one that has recorded data on the number of HIV+ mothers choosing to formula feed. They have recorded 5 in the CR and nothing in the SS. The rest of the clinics do not have data on this.

3.5.3 INFANT INDICATORS

Table 15 below shows the data elements that are recorded on infant indicators for Lekwa sub-district:

Table 15: Infant indicator for Lekwa

	MISPIL	MS MSINANGO	SAKHILE	MORGENZO N	STANDERT ON HOSPITAL	STANWEST	CHURCH CLINIC
1. INFANT	1	2	3	4	5	6	
(1) No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit							
(2) No. PCR tests done by the six week immunisation visit	{1}			5			
(3) No. PCR tests positive at EPI clinic							
(4) No. PCR tests given to mothers at EPI clinic							
(5) No. mothers established positive							
(6) No. mothers established negative							
(7) No. of HIV exposed infants exclusively formula fed	{8}		5				
(8) No. of HIV exposed infants exclusively breast fed	{8}		1				
(9) No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)			5				
(10) No. infants referred to ART site			0				

Looking at the data elements recorded on the infant indicators for Lekwa sub-district, the data that has been recorded is either the one appearing on the CR or the one appearing on the monthly SS. One cannot compare or verify the information recorded on the CR and the monthly SS. There is poor recording of information on this one.

3.4 PMTCT INDICATORS AND DATA ELEMENTS FOR ALBERT LUTHULI SUB-DISTRICT

Albert Luthuli sub-district has a total of 19 clinics and 2 hospitals. Table 16-18 below shows the data elements recorded in the following indicators: ANC & PNC, Maternity indicators and infant indicators for the period of June 2008. Table 16 below shows the data elements that are recorded on the ANC & PNC indicators for Lekwa sub-district:

Table 16: ANC & PNC indicators

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
(1) No. of 1 st ANC visit	3(44) 12		7(-) 3	10(-) 15	34(3) 25	13DH S	20(22) 42	21(21) 12	18(20) 20	3D	20(20) 24	15(-) 10	24(-) 19	44D	39(1) 27	17(-) 12		19(19)		0(16)
(2) No. women counselled for VCT (pre-test confidential)	0(0)		7	27	34(-)		22(22)	21(21)	27(3)		20(2)	37		63	49			27(27)		21 (19)
(3) No. ANC tested for HIV	19(19)		4	26	29(29)		22(22)	21(21)	27(33)		20(20)	15	24	63				18(18)		20 (19)
(5) No. of women testing positive	6(7)			4	11(11)		6(6)	4(5)	8(4)		7(7)	10		16	13	6				3(4)
(6) No. women retested														0						
(7) No. women testing positive on retest														0						
(8) No. of HIV positive women with CD4 result				3(-) 0	11(-) 0							5(-) 0		16 0	17 0					4(4) 0
(9) No. of HIV positive women receiving ART			1(-) 0	2(-) 0								2(-) 0		0	4(-) 0					
(10) No. HIV positive women with CD4 cell count under ≤200				1				3 (-)				4		0	7					1(1)
(11) No. AZT courses dispensed to pregnant women at ANC				2										0						

No. of women testing for positive

There is tallying data in Nhlazatshe, Tjakastad and Glenmore clinics. The remaining facilities have either recorded data in the CR only or they have under recorded or over recorded in both the CR and the monthly SS.

No. of women retested

There is absolutely no data in all the facilities for both CR and monthly SS.

No of women testing positive on retest

There is absolutely no data in all the facilities for both CR and monthly SS.

No of HIV positive women with CD4 result

The DHIS has recorded 0 for all the facilities on this however, Mooiplaas, Nhlazatshe 4, Swallownest, Mayflower and Fernie1 clinics have recorded data only in the CR.

No of HIV positive women receiving ART

The DHIS has recorded 0 for all the facilities on this but Mooiplaas, Badplaas, Swallownest and Fernie1 clinics have recorded data only in the CR.

No of HIV+ women with CD4 cell count under 200

Almost all the clinics have only recorded data in the CR but not in the monthly SS. Some clinics do not have data on this.

No. of AZT courses dispensed to pregnant women at ANC

Only Mooiplaas clinic has dispensed AZT to 2 women, but there is no record for this on the monthly SS. The remaining clinics have not recorded data on this.

No. of NVP tablets dispensed to pregnant women at ANC

Glenmore, Swallownest and Mayflower have only recorded data in the CR but not in the monthly SS. The remaining clinics have not captured any data on this.

No. of pregnant women receiving prophylaxis-bactrim

Swallownest clinic has only recorded 4 pregnant women receiving prophylaxis in the CR but not in the monthly SS. The remaining clinics have not captured any data on this.

3.6.2 MATERNITY INDICATORS

Table 17 below shows the data elements that are recorded in maternity indicators for Albert Luthuli sub-district. The data for this section has only been completed by Mayflower, the rest of the facilities do not have data on this.

MATERNITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
(1) No. women established positive (at delivery)																				
(2) No. women on ART at delivery																				
(3) No. women on AZT > 4weeks																				
(4) No. women on AZT <4weeks																				
(5) No. of sdNVP tablets issued in labour ward																				
(6) No. of infants given NVP and AZT																3				
(7) No. HIV positive mothers choosing to formula feed																2				
(8) Live births to women with HIV																3				
(9) No of family planning issued postpartum																3				

Table 17 above shows that Mayflower has recorded data only in the CR but not in the monthly SS. It is therefore difficult to compare the accuracy of the data.

3.6.3 INFANT INDICATORS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
(1) No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit	1																			
(2) No. PCR tests done by the six week immunisation visit	8(-)																			0(4)
(3) No. PCR tests positive at EPI clinic	1																			
(4) No. PCR tests given to mothers at EPI clinic	1																			
(5) No. mothers established positive																				
(6) No. mothers established negative																				
(7) No. of HIV exposed infants exclusively formula fed	5(-)																			
(8) No. of HIV exposed infants exclusively breast fed	3																			
(9) No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)																				
(10) No. infants referred to ART site																				

Table 18 below shows the data elements that are recorded on infant indicators for Albert Luthuli sub-district:

3.6.3 INFANT INDICATORS ALBERT LUTHULI SUB-DISTRICT

No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit

Table 18 above shows that Vlakplaas clinic has recorded 1 patient in the CR and nothing in the monthly SS and Swallownest clinic has recorded 1 patient in the monthly SS and nothing on the CR. The remaining facilities do not have data on this.

No. PCR tests done by the six week immunisation visit

The data that has been recorded by Eerstehoek, Badplaas, Mayflower, Carolina Town and Slovela clinics does not tally at all because in some instance, they have only recorded data on the CR only and nothing on the monthly SS and vice versa.

No. PCR tests positive at EPI clinic

Both Vlakplaas and Carolina Town clinic have recorded data on the CR only and nothing on the monthly SS.

No. PCR tests given to mothers at EPI clinic

In terms of the PCR tests given to mothers, Vlakplaas and Carolina Town clinic have recorded data on the CR only and nothing on the monthly SS. Badplaas clinic has recorded 2 PCR tests given to mothers at EPI clinic on the monthly SS and nothing in the CR.

No. mothers established positive

Only Nhlazatshe no 4 has recorded accurate data (11/11) on both the CR and monthly SS. The remaining facilities have either recorded nothing or they have recorded data in the CR only.

No. mothers established negative

Slovela clinic has recorded accurate data on both the CR and the monthly SS (17/17). Fernie1 clinic has recorded 2 mothers on the CR only. The remaining facilities did not have data on this.

No. of HIV exposed infants exclusively formula fed

There is generally no accurate data recorded in all the facilities except for Nthlazatshe no4 (5/5) which has tallying data in both the CR and the monthly SS.

No. of HIV exposed infants exclusively breast fed

There is generally no accurate data recorded in all the facilities.

No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)

There is no data recorded on this in all the facilities.

No. infants referred to ART site

There is generally no accurate data recorded in all the facilities except for Carolina Town and Slovela clinics which have recorded data only on the CR.

3.7 PMTCT INDICATORS AND DATA ELEMENTS FOR PIXLEY KASEME SUB-DISTRICT

Pixley KaSeme sub-district has a total of 7 clinics and 2 hospitals. Table 19-21 below shows the data elements recorded in the following indicators: ANC & PNC, Maternity indicators and infant indicators for the period of June 2008. Table 19 below shows the data elements that are recorded on the ANC & PNC indicators for Pixley KaSeme sub-district:

Table 19: ANC & PNC indicators

	Vukuzakhe Clinic	Wakkerstroorn Clinic	Perdekop Clinic	Volkersdorp Clinic	Perdekop Hospital	Elizabetraal Hospital	Amersfoort	Daggakraal (Ikhemba Lomkhal)	Summit
1. ANC & PNC	1	2	3	4	5	6	7	8	9
(1) No. of 1 st ANC visit	23{--}12	14{14}0	14{14}10	9{28}17			--{23}28	--{39}35	52
(2) No. women counselled for VCT (pre-test counselled)	23{--}	50{18}	0{14}	26{24}			41{46}	28 {27}	
(3) No. ANC tested for HIV		17{17}	0{6}	26{24}			41{36}	27{27}	
(5) No. of women testing positive		5{5}		5{4}			14{15}	--{1}	
(6) No. women retested		0{}							
(7) No. women testing positive on retest		0							
(8) No. of HIV positive women with CD4 result								3{--}	
(9) No. of HIV positive women receiving ART									
(10) No. HIV positive women with CD4 cell count under ≤200									
(11) No. AZT courses dispensed to pregnant women at ANC	0{--}								
(12) No. of NVP tablets dispensed to pregnant women at ANC	0{--}	5{--}	0{3}					3{4}	4{4}
(13) No. pregnant women receiving prophylaxis – bactrim	0{--}			46{--}					

3.7.1 ANC and PNC INDICATORS

No. of 1st ANC visits

Table 19 above shows that there were 23 1st ANC clients that were verified in the CR at Vukuzakhe, but the cases were not recorded in the monthly SS and also data recorded in the CR is different from the one recorded on DHIS. Wakkerstroorn clinic has recorded the same data in both the CR and monthly SS however, DHIS records reflect 0 on this indicator. Also Perdekop clinic has recorded similar figures in both the CR and SS but DHIS records reflect 0 on this. Amersfoort and Daggakraal clinic reported data in SS that could not be verified in CR and the data is also different from the one recorded in the DHIS.

No. of women pre-test counselled (for VCT)

Not a single facility reported concordant data on this aspect. Wakkerstroom clinic, reported 18 clients on the SS, but 50 were counted on the CR. At Perdekop, the figure that appeared on the SS could not be verified in the CR. Volksrust, Daggakraal and Wakkerstroom underreported their cases in SS. Amersfoort clinic overreported in SS.

No. of women tested for HIV

Wakkerstroom and Daggakraal recorded similar figures in both the CR and SS. Data at Perdekop could not be verified in CR. Amersfoort underreported in SS.

No. of women testing positive

Only 3 facilities recorded the number of positive women – Wakkerstroom, Volksrust and Amersfoort.

No. of women retested

There was no data on women who were re-tested.

No. of positive women with CD4 result

Daggakraal recorded 3 clients on the CR, but nothing was reflected on the SS and the DHIS.

No. of positive women on ART

There were no records of pregnant women on ART in the CR, monthly SS and DHIS.

No. of positive women with CD4 count \leq 200

There were no records of pregnant women with CD4 count \leq 200. CD4 count data is captured under ART and not PMTCT.

No. of AZT courses dispensed to pregnant women on ANC

No data.

No. of NVP tablets dispensed to pregnant women at ANC

Wakkerstroom reported five cases on the CR, but there were no such records in the SS.

Daggakraal reported four cases in SS, but three were recorded on the CR. Ezamokuhle reported reliable figures.

No. of pregnant women receiving prophylaxis – bactrim

Volksrust had 46 cases in the CR, but no data on the SS.

3.7.2 MATERNITY INDICATORS

Table 20 below shows the data elements that are recorded in maternity indicators for Pixley KaSeme sub-district.

Table20: Maternity Indicators

	Vukuzakhe Clinic	Wakkerstro om Clinic	Top	Volgens Clinic		Bas Ballot	Amersfoort	Daggakraal (Jheremba Lokuphila)	Ezinkuhle
1. Maternity	1	2	3	4		6	7	8	9
(1) No. women established positive (at delivery)							2{--}		
(2) No. women on ART at delivery									
(3) No. women on AZT > 4weeks									
(4) No. women on AZT <4weeks									
(5) No. of sdNVP tablets issued in labour ward						7{--}	2{--}		
(6) No. of infants given NVP and AZT							2{--}		0{1}
(7) No. HIV positive mothers choosing to formula feed			0{1}		4{--}	1{--}			
(8) Live births to women with HIV					7{--}	1{--}			
(9) No of family planning issued postpartum									

There was a problem with the recording of maternity data. Data was either captured in CR or the monthly SS. Daggakraal recorded an infant who received NVP and AZT in SS and not in the CR. Facilities that do not deliver babies will not have this type of data, but hospitals ought to have the data.

3.7.3 INFANT INDICATORS

Table 21 below shows the data elements that are recorded on infant indicators for Pixley KaSeme sub-district:

Table 21: Infant Indicators

	Vukuzakhe Clinic	Wakkerstroom Clinic	Pardekop Clinic	St. Andrew's Clinic	Amajuba Hospital	St. Andrew's Ballot	Amersfoort	Ngqakrasa (Lokuphila)	Ezamokuhle
1. Infant	1	2	3	4	5	6	7	8	9
(1) No. of HIV positive mothers presenting at EPI (Expanded Programme on Immunisation) clinic at the six week visit	0{--}								
(2) No. PCR tests done by the six week immunisation visit	0{--}	3{--}					1{1}		
(3) No. PCR tests positive at EPI clinic	0{--}	1{--}							
(4) No. PCR tests given to mothers at EPI clinic	0{--}	4{--}					--{1}		
(5) No. mothers established positive	0{--}	0{--}	3{3}	5{--}					
(6) No. mothers established negative		0{--}	3{3}	19{--}			14{--}	--{26}	
(7) No. of HIV exposed infants exclusively formula fed	2{--}	0{--}	4{--}			1{--}		--{1}	
(8) No. of HIV exposed infants exclusively breast fed	1{--}	2{--}				1{--}			
(9) No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)	2{--}								
(10) No. infants referred to ART site									

No. of positive mothers presenting at Expanded Programme on Immunisation at the six week visit.

There was no data on positive mothers presenting at Expanded Programme on Immunization at the six week visit.

No. of PCR tests done at six weeks immunisation visit

Wakkerstroom reported one case in the CR and none in the SS. Amersfoort clinic reported one case in both the CR and SS.

No. of PCR tests positive at EPI clinic

Wakkerstroom reported one case in the CR.

No. of PCR tests given to mothers at EPI clinic

There was none.

No. of mothers established positive

Perdekop reported similar figures in both the CR and SS. Volksrust clinic reported five cases in the CR and none in the SS.

No. of mothers established negative

Perdekop again reported similar figures in both the CR and SS. Well done Perdekop. Volksrust reported 19 cases in the CR and none in the SS. The same happened with Amersfoort. Daggakraal reported 26 cases in the SS, but they could not be verified in the CR.

No. of HIV exposed infants exclusively formula fed.

At Vukuzakhe, two infants were on infant formula, but there were no women who tested positive, unless these were infants from earlier months. Wakkerstroom reported five positive women, but no infants on formula. Amersfoort had 14 positive women, and no infants on formula feeding. A lot of facilities reported formula shortages, which might be the possible reason for such low figures of infants on formula feeding. Are there other reasons?

No. of HIV exposed infants exclusively breastfed

This data element was also poorly captured. What are the reasons why there are no figures for exclusively breastfed infants?

No. of HIV exposed infants exclusively formula fed (recall period = last 24 hours)

Vukuzakhe clinic is the only facility that has recorded data on this but it is only reflecting in the CR not the monthly SS.

No. of infants referred to ART site

There is absolutely no data recorded in all the facilities.

4 Discussion

The value of the PMTCT programme is entirely dependent upon the accuracy of the data obtained from the paper-based registers. From the data presented in **Tables 1-21**, it is very clear that data recording continues to be a problem for most of the facilities in the Gert Sibande District. Out of the 75 clinics visited in the seven sub-districts, only less than a handful can somewhat record accurate data that tallies in both the CR and the monthly summary sheets. However, the data recorded by those few facilities does not even tally with the one recorded on the DHIS. The question that one asks is, if there is no data recorded in the CR and monthly SS, what informs the DHIS staff on the data they record on different indicators. There is definitely a need to review data discrepancies that is taking place at different levels of recording.

In terms of the ANC and PNC indicators, there are lot of discrepancies especially on the number of ANC tested for HIV, number of women testing positive, and number of women retested. There seems to be a trend in all the facilities that there is no data on the retesting of women. Moreover, there is a lot happening in the health facilities but not everything is recorded. For instance, most of the clinics do not have data on pregnant women receiving prophylaxis-bactrim. The nurses attribute the lack of consistency in recording data to a high workload. There also seems to be lack of data verification in most of the facilities which is why there is lot of discrepancies. In terms of the maternity indicators, most of the information is captured by the hospitals, still there is not a single hospital from the assessed ones that have recorded data that is accurate. The hospital staff also blames the lack of data inaccuracy to a high workload. Based on the above results, one can clearly see why there is a need for an intervention such as this that aims to improve the PMTCT services in Gert Sibande. Therefore, there is definitely a need to

conduct training on patient data recording with the nurses. It will also be important to highlight the importance for that.

5 Challenges experienced during field work

- There is generally poor filing system in most of the facilities, HAST coordinators had to assist the sisters in charge to find the documents needed for the interview.
- Monthly summary sheets were not available during the day of the interview, some due to the fact they lack resources like photocopy machines.
- Clients that appeared in CR and were not recorded in SS, means that they are not recorded on the DHIS. The data that is captured in CR may easily be lost if loose sheets are misplaced or lost.
- Most of the facilities are under-staffed, as a result their daily schedule had to be interrupted in order to accommodate HSRC researchers.

6 Recommendations

- Clinic supervisors to sign the data off as correct to avoid discrepancies.
- Data should be discussed in staff meetings to allow the nurses changes to be made.
- Regular feedback from the LSA on data recording is critical. This will assist the clinic staff to know program progress and gaps and ways to improve implementation of PMTCT services.
- Filing system should be seriously reviewed.
- PMTCT staff in health facilities should review each monthly summary form them to keep track of the trends.
- Supervisors should conduct monthly or periodic meetings to disseminate findings, review
- Procedures for data editing and cleaning should be in place and enforced at each level of data collection.
- Protocol for data verification procedures would decrease the amount of erroneous data. Protocols should include actions for correcting different types of errors, and the responsible person for carrying out those actions. Corrections should be written in the data logbook and signed off by the appropriate responsible person.
- Training staff on these protocols will increase overall efficiency and value of the system. It is important to provide basic knowledge and skills to PMTCT service providers on how to collect data and produce statistical report for effective monitoring of PMTCT services.

7 Conclusion

The data presented above shows that there is an urgent need to train the nurses on data recording and its importance. Depending of the population size to be served by the health facility, more staff should also be employed to assist with data recording. It is assumed that if all this is in place, PMTCT services will be improved in the Gert Sibande District.

B) Survey of pregnant women

Sampling and procedures

External interviewers approached all pregnant women coming to antenatal care, informed them about the study, and ask them to participate. Individual interviews were conducted using semi-structured questionnaires. Women were eligible to participate if they already had an ANC session with their current pregnancy (and thereby had the opportunity to participate in VCT). Thirty ANC patient exit interviews were targeted per PMTCT site, conveniently sampled, and interviewed after informed consent has been obtained.

Measure for ANC users

In order to identify factors associated with refusal of HIV testing among pregnant women this component of the questionnaire (Chopra et al., 2005; Kebaabetswe, 2007; Kominami et al., 2007; Mfundisi et al., 2005; Nguyen et al., 2008; Petrovic et al., (2007) included: HIV testing status, demographic factors (age, educational background, marital status, family size and number of children) gestational age, frequencies of antenatal visits, general knowledge about HIV, specific knowledge of MTCT of HIV, breast feeding and attitudes toward HIV testing. Participants' own reasons for not using any part of the service (counselling or testing) are obtained by asking open-ended questions such as 'Under which conditions would you have accepted to do individual counselling for HIV?' and 'Under which conditions would you have accepted to do the HIV test?' (Sarker et al., 2007). For measuring attitude toward HIV testing, the modified HIV-Antibody Testing Scale developed by Boshamer and Bruce in 1999 and validated in South Africa (Peltzer, 2002) was used to assess respondents concern about family support, social support, and privacy.

B) Survey results of pregnant women

Table 1: Background characteristics

		N=1703	%
Age	18-24	942	55.3
	25-29	361	21.2
	30-34	239	14.0
	35 or more	161	9.5
Ethnicity	Zulu	1164	67.2
	Swati	337	19.5
	Other	231	13.3
Marital status	Single	1264	74.7
	Cohabiting	266	15.7
	Married	146	8.6
	Divorced/separated/widowed	16	0.9
Formal education	Grade 7 or less	236	13.9
	Grade 8 to 11	823	48.4
	Grade 12 or more	640	37.7
Number of own biological children	0	282	20.3
	1	552	39.8
	2	327	23.6
	3	121	8.7
	4 or more	105	7.6

PMTCT knowledge score	0	113	6.8
	1	197	11.8
	2	246	14.7
	3	654	39.1
	4	461	27.6
Know ART	Yes	1124	67.5
Know someone on ART	Yes	795	47.8
HIV risk perception	1=not at all susceptible/at risk	79	4.8
	2	108	6.6
	3	453	27.6
	4	255	15.5
	5=very susceptible/at risk	746	45.5
Discuss HIV with partner	Yes	1211	72.2
Wants partner to be tested for HIV	Yes	1610	96.5
Physical abuse by partner in past 6 months	Yes	232	13.6
Aware of a risk factor in your primary partner (had sex with another person in the last 90 days, had an STI or STI symptoms in the past 90 days, or is HIV positive)	Yes	1204	70.7
History of STI in past 12	Yes		33.6
Had another HIV test previously	Yes	1037	65.1
Number of sexual partners in past 12 months	0-1		85.9
	2 or more		14.1
Condom use with your primary partner in past 3 months	• Never		55.9
	• Less than half of the time		11.2
	• More than half of the time		9.8
	• Half of the time		16.5
	• Every time		6.7

Did you receive group HIV counselling?

In the group counseling session did you receive...	n	%
a...information about HIV transmission and how to prevent it?	1265	96.9
b...information about the HIV testing process?	1269	97.5
c...information about the importance of early access to treatment?	1255	96.5
d...information about choices for infant feeding?	1230	94.6
e...information about mother-to-child transmission of HIV and possible measures to reduce this?	1238	95.2
f...interventions that can keep HIV-exposed infants healthy such as cotrimoxazole prophylaxis and antiretroviral therapy?	1205	93.0
g...assurance on confidentiality and discussion of shared confidentiality and couple counselling?	1226	94.8
H...information about the option not to take an (HIV) test?	1231	95.4

Did you receive pre-test counselling?

In the pre-test counselling session did you receive...	n	%
a...information on HIV/AIDS transmission and prevention methods?	1442	97.0
b...information on mother-to-child transmission (MTCT) of HIV and possible interventions to prevent it?	1418	95.6
c...information on HIV testing process?	1444	97.6
d...information on the interpretation of test results?	1405	95.1
In the pre-test counselling session was...		
e...information provided in the group counselling session followed-up on?	1325	90.0
f...consent (written and verbal) for HIV-testing obtained?	1438	97.6
g...confidentiality and voluntary testing explained and ensured?	1433	97.3
h...a confidential and private counselling room provided?	1423	96.5
i...previous risk behaviour discussed?	1303	88.5
j...the window period discussed?	1314	89.1
k...asked what your reaction would be if found HIV+?	1367	92.7
l...disclosure to partner / relatives discussed?	1382	93.7
m...encouraged bringing partner to testing?	1375	93.3
n...the counsellor non-judgmental and respectful?	1428	96.9
o...the counsellor encouraging you to ask questions and answered them?	1419	96.8

Participation in HIV counselling and testing (HCT) and reported reasons for not taking part

Among 1703 patients interviewed 85.1% agreed to participate in individual HIV counseling and 81.8% received post-test HIV counseling.

Refused participation in HIV counselling (n=258) was in descending order of importance:

1. Know my HIV status already (41.9%),
2. Afraid of test (37.8%)
3. Afraid of lack of confidentiality (36.6%),
4. Did not understand the process during group education session (32.6%),
5. Had to wait for long time (23.5%),
6. Did not like the counselling process (22.0%),
7. Did not like the counsellor (20.5%),
8. Partner has not agreed (18.0%), and
9. Other, specify: mainly operational (no test kits) and not ready yet

Refused participation in HIV post-test counselling (n=310) in descending order of importance:

1. Know my HIV status (45.3%),
2. Need more time to make the decision (30.5%),
3. Fear of infant formula distribution stigma (25.8%),
4. I don't have enough information about HIV testing (25.3%),
5. Afraid of test (24.4%),
6. Afraid of lack of confidentiality (23.8%),
7. Did not understand the process during counselling (22.1%),
8. Refused participation in testing (21.5%),

9. Had to wait for long time (18.9%),
10. I don't know the benefits of knowing my HIV status (17.4%),
11. Did not like the counsellor (17.4%),
12. Partner has not agreed (13.8%),
13. I can't get any medication if I am found HIV positive (13.8%),
14. Other, specify: mainly operational (no test kits) and intended to test later

Determinants of HIV pre-test and post-test counselling

Variables	Determinants of pre-test counselling		Determinants of post-test counselling	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Age	1.00 (0.97-1.02)	---	0.98 (0.96-1.00)	---
Marital status				
Single	1.00		1.00	
Cohabiting	1.13 (0.79-1.63)	---	1.12 (0.80-1.57)	---
Married	0.77 (0.46-1.31)		0.91 (0.57-1.44)	
Divorced/separated/widowed	1.36 (0.38-4.80)		2.10 (0.72-6.10)	
Formal education	1.18 (0.97-1.43)	---	1.33 (1.11-1.56)**	
Number of own children	0.89 (0.79-1.02)	---	0.88 (0.78-0.98)*	
PMTCT knowledge score	1.29 (1.16-1.43)***		1.07 (0.96-1.18)	---
Know ART	1.05 (0.78-1.40)		0.91 (0.69-1.19)	
Know someone on ART	0.85 (0.65-1.12)		0.90 (0.70-1.16)	
HIV risk perception	1.03 (0.92-1.16)	---	1.13 (1.02-1.25)*	
Discuss HIV with partner	1.30 (0.97-1.74)		1.32 (1.01-1.73)*	
Want partner tested for HIV	1.22 (0.61-2.44)		1.20 (0.63-2.30)	
Physical abuse by partner	0.48 (0.31-0.75)***		0.71 (0.50-1.19)	
Aware of a risk factor in your primary partner	1.21 (0.82-1.80)		1.09 (0.77-1.55)	
History of STI in past 12 months	0.90 (0.62-1.31)		1.19 (0.85-1.68)	
Had HIV test previously	2.39 (1.80-3.16)***		1.78 (1.33-2.24)***	
Two or more sexual partners in the past 12 months	0.55 (0.34-0.80)*		0.64 (0.41-0.98)*	
Condom use consistency	1.09 (0.95-1.25)		0.88 (0.78-0.98)*	
Group pre-test HIV counselling score	1.42 (1.24-1.63)***		1.37 (1.20-1.56)***	
Pre-test HIV counselling score	--		1.20 (1.12-1.29)***	

Significant at * $P < .05$, ** $P < .01$, *** $P < .001$

Intimate Partner Violence, alcohol use and sexual behaviour

Table 2: ANC delivery history

Items	N (%)
2nd ANC visit	830 (60.5)
3rd or more ANC visit	802 (61.4)
Number of months pregnancy (Gestational age)	N (%)
First Trimester	83 (5.3)
Second Trimester	589 (37.3)
Third Trimester	902 (57.2)
Have previous experience of giving birth	1040 (64.4)
Place of delivery of last baby	N (%)
Health facility	939 (89.1)
Home with traditional birth attendant	84 (8.0)
Home without traditional birth attendant	31 (2.9)

Most had previous experience in giving birth (64.4%), were 2nd (60.5%) and 3rd (61.4%) ANCs and were mainly in the 2nd (37.3%) and 3rd (57.2%) trimesters and had delivered in health facilities (89.1%). It is important to note that 8% had delivered home with traditional birth attendant.

Table 3: Intimate partner violence

Experience of physical abuse by partner/husband in the past 6 months	N (%)
Yes	135 (13.8)
No	827 (84.8)
Not applicable	13 (1.3)
Has your partner twisted your arm or hair, or threw something at you that could hurt?	N (%)
Within The Preceding 12 Months	45 (32.6)
Before the preceding 12 months	19 (13.8)
Never happened	74 (53.6)
Has your partner pushed, grabbed, or slapped you?	N (%)
Within the preceding 12 months	47 (34.1)
Before the preceding 12 months	33 (23.9)
Never happened	58 (42.0)
Partner kicked you or slammed you against a wall, punched or hit you with something that could hurt	N (%)

you?	
Within the preceding 12 months	31 (23.5)
Before the preceding 12 months	21 (15.9)
Never happened	80 (60.6)
Partner beat you up, or burned or scalded you on purpose?	N (%)
Within the preceding 12 months	26 (19.8)
Before the preceding 12 months	14 (10.7)
Never happened	91 (69.5)
Partner choked you, or burned or scalded you on purpose?	N (%)
Within the preceding 12 months	12 (9.1)
Before the preceding 12 months	14 (10.6)
Never happened	106 (80.3)
Partner used force, like hitting, holding you down, or using a weapon to make you have sex?	N (%)
Within the preceding 12 months	18 (13.4)
Before the preceding 12 months	15 (11.2)
Never happened	101 (75.4)
Partner put you down with words, emotionally hurt or made you feel afraid?	N (%)
Within the preceding 12 months	55 (38.7)
Before the preceding 12 months	30 (21.1)
Never happened	57 (40.1)

About 14% of the respondents reported that they had experienced physical abuse by partner in the past 6 months. Respondents indicated that their partner had:

Twisted their arm or hair, or threw something at them that could hurt within the preceding 12 months (32.6) and before the preceding 12 months (13.8%)

Pushed, grabbed, or slapped them within the preceding 12 months (34.1%) and before the preceding 12 months (23.9%)

Kicked or slammed them against a wall, punched or hit them with something that could hurt within the preceding 12 months (23.5%) and before the preceding 12 months (15.9%)

Beat them up, or burned or scalded them on purpose within the preceding 12 months (19.8%) and before the preceding 12 months (10.7%)

Choked them, or burned or scalded them on purpose within the preceding 12 months (9.1%) and before the preceding 12 months (10.6%)

Used force, like hitting, holding them down, or using a weapon to make them have sex within the preceding 12 months (13.4%) and before the preceding 12 months (11.2%)

Put them down with words, emotionally hurt or made them feel afraid within the preceding 12 months (38.7%) and before the preceding 12 months (21.1%)

Table 4: Alcohol use

How often do you have a drink containing alcohol in the past 12 months?	N (%)
Never	799 (86.7)
Monthly or less	84 (9.1)
2 to 4 times a month	19 (2.1)
2 to 3 times a week	17 (1.8)
4 or more times a week	2 (0.2)
How many drinks containing alcohol do you have on a typical day when you are drinking	N (%)
1 or 2	53 (38.7)
3 or 4	60 (43.8)
5 or 6	15 (10.9)
7 or 8	4 (2.9)
10 or more	5 (3.6)
How often do you have more than five drinks (men) and four drinks (women) more on one occasion	N (%)
Never	34 (23.8)
Less than monthly	72 (50.3)
Monthly	19 (13.3)
Weekly	18 (12.6)
Spouse/partner use alcohol	489 (49.9)
Concerned that spouse/partner drinks too much alcohol	257 (43.9%)
How many times in the last one year has your spouse/partner been violent towards you while under the influence of alcohol?	N (%)
Never	37 (20.2)
Between 1 and 3 times	75 (41.0)
Between 4 and 6 times	48 (26.2)
Between 7 and 9 times	8 (4.3)
10 or more times	15 (8.1)

The majority of the respondents had never had a drink containing alcohol in the past 12 months (86.7%), had less than 5 drinks on a typical day (82.5%) and had more than 5 drinks (men) and 4 drinks (women) less than monthly (50.3%). Almost 50% of the respondents indicated that spouse/partner uses alcohol, 43.9% were concerned that spouse/partner uses alcohol too much. Respondents also mentioned that in the last one year their spouse/partner had been violent towards them while under the influence of alcohol between 1 and 3 times (41.0%), 4 and 6 times (26.2%), 7 and 9 times (4.3%), 10 and more times (8.1%).

Table 5: Sexual risk behaviour

During the past 12 months how many sexual partners did you have?	N (%)
None	21 (2.3)
1	773 (83.7)
2	102 (11.1)
3	21 (2.3)
4	3 (0.3)
5	1 (0.1)
10	2 (0.2)
Has a health care provider told you that you have an STI in the past 12 months?	N (%)
Yes	329 (33.5)
No	654 (66.5)
During the past 3 months did you use a condom with your primary partner?	N (%)
Never	540 (55.8)
Less than half of the time	107 (11.1)
More than half of the time	94 (9.7)
Half of the time	161 (16.6)
Every time	65 (6.7)
Aware of any risk factor in your primary partner	N (%)
Yes	672 (70.7)
No	278 (29.3)
How worried are you that you might already have or in the future get HIV, the virus that causes AIDS?	N (%)
Not at all worried	209 (21.4)
Somewhat worried	135 (13.8)

A little worried	211 (21.6)
Very worried	422 (43.2)

The majority of the respondents (83.7%) had 1 partner during the past 12 months, 33.5% were told that they had an STI during the past 12 months, 55.8% had never used a condom with their primary partner during the past 3 months and 70.7% were not aware of any risk factor in their primary partner. Only 43.2% were very worried that they might already have or in the future get HIV.

C) Survey of mothers

Sampling and procedures

Individual interviews with People Living with HIV (PLHIV) post-delivery (3-6 months postpartum) and who have used PMTCT services before were conducted. In all PMTCT service points in the study area, every second consecutive PLHIVs was invited to participate in the study through referrals by health care providers. These individuals were asked to inform PLHIVs (post-delivery and who have used PMTCT services before) about the study when PLHIVs come to clinic visits, and encouraging them to volunteer.

Recruitment continued until 10 respondents per facility had agreed to participate. Health care providers from the selected clinics were asked to inform PLHIVs (post-delivery and who have used PMTCT services before) about the study when PLHIVs come to clinic visits. Individuals were informed about the study and requested to participate in a confidential interview concerning their health and social situation. They were also informed that participation is voluntary. Before the survey was administered, individuals were given background information on the study. PLHIVs were then asked to complete and sign a consent form before the interview took place in a private area in or outside the clinic. The interview was conducted by an external interviewer trained in administration of the semi-structured interview schedule for PLHIVs. Interviewers were recruited from the study areas with at least a matric qualification and trained in interview administration and ethics. They were then placed over three weeks in the PMTCT clinics to conduct the interviews. The interview was anonymous and confidential, no identification information was entered on the questionnaire and also no information from medical records was accessed. The questionnaire required approximately 45 minutes for completion.

Measure

The questionnaire consisted of the following sections: demographics, knowledge of HIV transmission, antenatal care utilization, HIV counselling and testing, antiretroviral treatment, delivery and infant profile, stigma, infant feeding and family planning.

2. Demographic Information

The demographic information included the following: race, language, highest educational qualification, number of biological children and marital status.

2.1 Race

About 98% (n=799) of the participants are African; 0.9% (n=7) Coloured; 0.2% (n=2) Indian and 0.1% (n=1) whites.

2.2 Language

Most of the participants interviewed speak Zulu as their home language 70.8% (n=577), followed by Isiswati 12.3% (n=100); English 1.1% (n=9); 0.7% (n=6) Afrikaans and other languages 13% (n=106).

2.3 Highest educational qualification

In terms of the educational qualifications only 4.4% have no schooling; 27.2 (n=222) have std10/matric/N3; 19.5% (n=159) have std9/gr11/N2; 16.1 % (n=131) std6- std7/gr8-gr9/abet4 and 2.9% (n=24) Diploma(s)/ Occupational certificate(s).

2.4 Number of biological children

The majority of the participants 34.2% (n=279) have 1 child; 32.8% (n=267) 2 children; 14.4% (n=117) 3 children; 8.7% (n=71) 4 children and between 0.1 and 0.2% have 8-9 children.

2.5 Marital status

The majority of the participants are single 66% (n=538); 20.2% (n=165) cohabitate; 9.9% (n=81) married; 1% (8) has divorced and 1.2%(n=10) are widowed.

3. HIV KNOWLEDGE

Table1: HIV Transmission questions

Question	Yes		No		Don't know		No response		Total	
	N	%	N	%	N	%	N	%	N	%
1. Can HIV positive mother infect her baby with HIV during pregnancy	571	70.1	169	20.7	69	8.5	6	0.7	815	100
2. Can HIV positive mother infect her baby with HIV during delivery	640	78.5	117	14.4	56	6.9	2	0.2	815	100
3. Can HIV positive mother infect her baby with HIV during breastfeeding	635	77.9	110	13.5	65	8.0	5	0.6	815	100

Participants were asked about the HIV transmission questions. Question 1 on Table 1 shows that 70.1% (n=571) agree that HIV positive mother can infect her baby with HIV during pregnancy; 20.7% (69) disagree and 8.5% (69) do not know. Question 2 shows that 78.5% (640) of the participants believe that HIV positive mother can infect her baby with HIV during delivery; 14.4% (117) disagree and 6.9% (56) do not know. Question 3 shows that 77.9% (n=635) of the participants believe that HIV positive mother can infect her baby with HIV during breastfeeding; 13.5% (n=110) disagree and 8% (n=65) does not know.

Table 2: ANC information

Question	Yes		No		No response		Total	
	N	%	N	%	N	%	N	%
When you were pregnant with this baby, did you see a traditional birth attendant	205	25.2	608	74.6	2	0.2	815	100
When you were pregnant with this baby, did you go to the clinic or hospital for check ups?	771	94.6	41	5.0	3	0.4	815	100

Table 2 shows that 25.2% (205) of the participants visited TBA when they were pregnant and 74.6% (608) did not. About 94.6% (771) participants went to clinic or hospital for check up when they were pregnant and 5% (41) did not. On average 19.3% (157) of the participants visited the clinic or hospital four times during their pregnancy and the father did not accompany most of the mothers 77.7% (633).

4. MALE INVOLVEMENT

Table 3: Male involvement

Questions	Yes		No		No response	
	N	%	N	%	N	%
Did you receive information on the importance of partner testing	708	86.9	73	9.0	34	4.2
Did you receive education on safer sexual practices and provision of condoms	726	89.1	56	6.9	33	4.0
Does your current partner know his status	366	44.9	201	24.7	118	14.5
Was your partner contacted after your results came back positive	313	38.4	282	34.6	135	16.6
WAs your partner asked to take an HIV test	417	51.2	198	24.3	130	16.0

Table 3 shows that 86.9% (n=708) of the participants received information on the importance of partner testing; 9% (n=34) did not and 4.2% (n=34) did not respond. About 89.1% (n=726) of the participants received education on safer sexual practices and provision of condoms; 6.9% (n=56) did not and 4% (n=33) did not respond. In terms of the HIV status, 44.9% (n=366) of the participants reported that their current partner know his status and 38.3% (n=313) reported that their partner contacted after your results came back positive. About 52.2% (n=417) of the participants reported that their partner asked to take an HIV test.

5. ARV ADHERENCE

Table4: ARV adherence

Questions	Yes		No		No response		Total	
	N	%	N	%	N	%	N	%
Did you receive explanations that AZT and NVP reduce the chance of baby contracting virus	721	88.5	60	7.4	34	4.2	815	100
Did you receive information on how to take AZT and Nevirapine	705	86.5	74	9.1	36	4.4	815	100

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