

**SOUTH AFRICAN PRIMARY HEALTHCARE LEVEL ESSENTIAL MEDICINES LIST  
CHAPTER 6: OBSTETRICS & GYNAECOLOGY CONDITIONS  
NEMLC RECOMMENDATIONS FOR MEDICINE MANAGEMENT (2020)**

Medicine amendment recommendations, with supporting evidence and rationale are listed below. Kindly review the medicine amendments in the context of the complete chapter for obstetrics and gynaecology conditions.

Note: The PHC chapter has been updated to align to previous NEMLC recommendations as well as the recent NEMLC-approved Adult Hospital Level STGs and EML, 2019 edition.

**AMENDMENTS TO MEDICINE TREATMENT/ MANAGEMENT**

| SECTION  | MEDICINE/ MNGEMENT  | ADDED/DELETED/AMENDED   |
|--|---|---|
| <b>OBSTETRICS</b>  |   |   |
| <b>6.2 Miscarriage</b>   | Anti-D immunoglobulin, IM                                 | Dose amended  |
| <b>6.2.1 Management of incomplete miscarriage in the 1<sup>st</sup> trimester, at primary health care level - medical evacuation</b> | Misoprostol PV  | Dose amended  |
|  | Misoprostol   | Directions for use amended & cautionary added                       |
| <b>6.3.1 Management of termination of pregnancy at primary health care level: gestation ≤12 weeks (and 0 days)</b>                   |   |   |
| - medical TOP (if gestation < 9 weeks and 0 days gestation)  | Misoprostol, sublingual                                   | Added, cautionary for bleeding added                                |
| - medical and surgical TOPs (MVA):<br>In Rh-negative, non-sensitised women   | Anti-D Immunoglobulin, IM                                 | Dose amended  |
| - medical and surgical TOPs (MVA)  | Contraception   | Guidance provided on counselling                                    |
| <b>6.4.5.1 Cystitis</b>  | Nitrofurantoin. Oral                                      | Deleted with cross reference to section 8.4 Urinary tract infection |
| <b>6.4.7 Preterm labour (PTL) - prevention</b>   | Referral  | Indications for referral to prevent preterm labour added            |
| <b>6.8 HIV in pregnancy</b>  |   |   |
| -pregnant women with CD4 <100 cells/mm <sup>3</sup> , CrAg+  | Fluconazole, oral   | Deleted, cautionary added   |
| - First-line ART regimens  | Tenofovir + Emtricitabine + Efavirenz, oral (TEE)         | Indication amended  |
|  | Tenofovir + Lamivudine + Dolutegravir, oral (TLD)         | Added   |
|  | Nevirapine  | Deleted   |
| - HIV infected pregnant women in labour not on ART   | Nevirapine + Tenofovir +Emtricitabine, oral (single dose) | Deleted   |
|  | Nevirapine, oral (single dose)                            | Added   |
|  | Tenofovir + Lamivudine + Dolutegravir, oral (TLD)         | Added   |
| - viral load monitoring for 1st line regimens in pregnant and breastfeeding women  | Delivery viral load                                       | Added   |
|  | VL non-suppression algorithm                              | Added   |
| <b>6.9 Maternal mental health</b>  |   |   |
| <b>6.9.1 6.9.1 Perinatal depression and/or anxiety</b>   | Non-pharmaceutical management                             | Amended   |
| <b>6.9.2 Bipolar, schizophrenia, and related disorders</b>   | Non-pharmaceutical management                             | Amended   |

**6.2 MISCARRIAGE**

Anti-D immunoglobulin: *dose amended*

Dose amended to align with Guidelines:

For all miscarriages in Rh-negative, non-sensitised women: (O36.0)

- Anti-D immunoglobulin, IM, 50 ~~100~~ mcg preferably within 72 hours but may be given up to 7 days following management of miscarriage.

**Level of Evidence: III Guidelines<sup>1</sup>**

<sup>1</sup> NICE Clinical Guideline: 156 - Routine antenatal anti-D prophylaxis for women who are rhesus D negative, 2008.

<https://www.nice.org.uk/guidance/ta156/resources/routine-antenatal-antid-prophylaxis-for-women-who-are-rhesus-d-negative-pdf-82598318102725>

*Wastage:* National Bioproduct Institute is the sole supplier of anti-D immunoglobulin and there are concerns that as this product is only available as a 100 mcg formulation, wastage occurs when only 50 mcg is required. It was recommended that the NDoH discusses this matter with the supplier.

### 6.2.1 MANAGEMENT OF INCOMPLETE MISCARRIAGE IN THE 1ST TRIMESTER, AT PRIMARY HEALTH CARE LEVEL

#### Medical evacuation

*Misoprostol: protocol amended*

Recommendations aligned with the updated FIGO<sup>2</sup> Guidelines, as follows:

*From:*

- ~~Misoprostol, oral/PV, 600 mcg as a single dose.~~
  - ~~Repeat after 24 hours if necessary.~~

*To:*

- Misoprostol, PV, 800 mcg every 3 hours for 2 doses.
  - Repeat after 24 hours if necessary.
- OR**
- Misoprostol, SL, 600 mcg every 3 hours for 2 doses
  - Repeat after 24 hours if necessary.

**Level of Evidence: III Guidelines**

### 6.3.1 MANAGEMENT OF TERMINATION OF PREGNANCY AT PRIMARY HEALTH CARE LEVEL: GESTATION ≤12 WEEKS (AND 0 DAYS)

#### Medical TOP (if gestation ≤ 9 weeks and 0 days gestation)

*Misoprostol: directions for use amended & cautionary added*

The text of the STG was updated as follows:

- Mifepristone, oral, 200 mg, immediately as a single dose.  
Followed 24–48 hours later by:
- Misoprostol, ~~PV~~ 800 mcg, sublingually by self-administration.
  - If expulsion has not occurred 4 hours after misoprostol administration, a second dose of misoprostol 400 mcg oral/PV may be given.

**Level of Evidence: III Guidelines<sup>3</sup>, Expert opinion**

#### Cautionary note

The following note was added to the STG, aligned with the Adult Hospital Level STG and EML, 2019:

**Note:** Bleeding may persist for up to 1 week. If there is no bleeding after the second dose of misoprostol, the woman must return to the facility as soon as possible as there is a possibility of an incomplete procedure or ectopic pregnancy

#### Medical and surgical TOPs (MVA): In Rh-negative, non-sensitised women:

*Anti-D immunoglobulin: dose amended*

Similar to section 6.2: Miscarriage, the dose of anti-D immunoglobulin was amended from “100 mcg” to “50mcg”, to align with Guidelines:

- For both medical and surgical TOPs (MVA):  
In Rh-negative, non-sensitised women:
  - Anti-D immunoglobulin, IM, 50–~~100~~ mcg preferably within 72 hours but may be given up to 7 days following TOP.

**Level of Evidence: III Guidelines<sup>4</sup>**

*Contraception: guidance provided on counselling*

Text of the STG was amended to include the following:

#### **Contraception**

Counsel all women on effective contraception, especially long-acting reversible methods.

<sup>2</sup> Morris JL, Winikoff B, Dabash R, Weeks A, Faundes A, Gemzell-Danielsson K, Kapp N, Castleman L, Kim C, Ho PC, Visser GHA. FIGO's updated recommendations for misoprostol used alone in gynecology and obstetrics. *Int J Gynaecol Obstet.* 2017 Sep;138(3):363-366. <https://www.ncbi.nlm.nih.gov/pubmed/28643396>

<sup>3</sup> Royal College of Obstetricians and Gynaecologists. The Care of Women Requesting Induced Abortion. Evidence-based Clinical Guideline Number 7. RCOG Press November 2011. [http://www.rcog.org.uk/files/rcog-corp/Abortion%20guideline\\_web\\_1.pdf](http://www.rcog.org.uk/files/rcog-corp/Abortion%20guideline_web_1.pdf)

<sup>4</sup> NICE Clinical Guideline: 156 - Routine antenatal anti-D prophylaxis for women who are rhesus D negative, 2008.

<https://www.nice.org.uk/guidance/ta156/resources/routine-antenatal-antid-prophylaxis-for-women-who-are-rhesus-d-negative-pdf-82598318102725>

All methods can be given at the time of the procedure, with the exception of the IUCD at a medical TOP.

#### Level of Evidence: III Guidelines<sup>5</sup>

##### 6.4.5.1 CYSTITIS

Nitrofurantoin, oral: *deleted with cross reference to section 8.4 Urinary tract infection*

##### 6.4.7 PRETERM LABOUR (PTL)

#### Prevention

Referral: *Indications for referral to prevent preterm labour added*

The following was added to the STG text:

Women with a previous spontaneous preterm delivery are at higher risk for preterm delivery in the next pregnancy. In certain high-risk cases, pregnancy may be prolonged by the careful consideration of either cervical cerclage or vaginal progesterone therapy provided at hospital level. Refer the following women for cervical screening:

- » A history of 2nd trimester miscarriage (between 16 and 26 weeks)
- » Previous history of spontaneous preterm birth between 27 and 34 weeks
- » No need to refer previous late preterm deliveries (34-37 weeks)

#### Level of Evidence: III Guidelines<sup>6</sup>

##### 6.8 HIV IN PREGNANCY

#### Pregnant women with CD4 < 100 cells/mm<sup>3</sup>, CrAg+

Fluconazole, oral: *deleted with a cross-referral to section 11.3.4: Cryptococcosis; and cautionary added*

Text was amended as follows, noting the risk of fluconazole in pregnancy.

Amended from:

#### **If CrAg positive, asymptomatic and > 13 weeks of gestation (in the 2<sup>nd</sup> trimester):**

- ~~If not previously treated, start fluconazole, oral, 800 mg daily for 2 weeks, then 400 mg daily for 8 weeks, then 200 mg daily until CD4 > 200 cells/mm<sup>3</sup>.~~

#### **Note:**

- » ~~If there is uncertainty about gestational age, refer for ultrasound scan before commencing fluconazole.~~
- » ~~If CrAg positive and symptomatic (e.g. headache, vomiting, confusion, fever), refer immediately for lumbar puncture and further management.~~

To:

#### **If CrAg-positive, consult an ID expert.**

See Section 11.3.4: Cryptococcosis.

#### **CAUTION**

- » Fluconazole should be avoided in the 1<sup>st</sup> trimester, but pregnant women should be counselled that the benefits of fluconazole may outweigh the risks in the management of cryptococcosis.
- » All pregnant women <20 weeks gestation exposed to fluconazole should have an ultrasound scan to detect congenital abnormalities.
- » For management of breastfeeding mothers, consult a specialist; as fluconazole is present at concentrations similar to maternal plasma concentrations in breast milk that will be transmitted to the breastfed infant.

#### Level of Evidence: III Registry studies<sup>7,8</sup>, Guidelines<sup>9, 10, 11</sup>

<sup>5</sup> WHO. Safe abortion: technical and policy guidance for health systems, 2012.

[http://www.who.int/reproductivehealth/publications/unsafe\\_abortion/9789241548434/en/](http://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241548434/en/)

<sup>6</sup> National Department of Health, Essential Drugs Programme: Adult Hospital Level STGs and EML, 2019. <http://www.health.gov.za/>

<sup>7</sup> Mølgaard-Nielsen D, Pasternak B, Hviid A. Use of oral fluconazole during pregnancy and the risk of birth defects. N Engl J Med. 2013 Aug 29;369(9):830-9.

<http://www.ncbi.nlm.nih.gov/pubmed/23984730>

<sup>8</sup> Mølgaard-Nielsen D, Svanström H, Melbye M, Hviid A, Pasternak B. Association Between Use of Oral Fluconazole During Pregnancy and Risk of Spontaneous Abortion and Stillbirth. JAMA. 2016 Jan 5;315(1):58-67. <http://www.ncbi.nlm.nih.gov/pubmed/26746458>

<sup>9</sup> National Department of Health, Essential Drugs Programme: Adult Hospital Level STGs and EML, 2019. <http://www.health.gov.za/>

<sup>10</sup> Govender NP, Meintjes G (Chairpersons), Bicanic T, Dawood H, Harrison TS, Jarvis JN, Karstaedt AS, Maartens G, McCarthy KM, Rabie H, Variava E, Venter WDF (Expert panel members), Boulware DR, Chiller T, Meya DB, Scriven J (Reviewers). Guideline for the prevention, diagnosis and management of cryptococcal meningitis among HIV-infected persons: 2013 update. S Afr J HIV Med 2013;14(2):76-86. <http://www.sajhivmed.org.za/index.php/hivmed/article/view/82/128>

<sup>11</sup> South African Medicines Formulary. 12th Edition. Division of Clinical Pharmacology. University of Cape Town, 2016.

The referral criteria was amended to refer if LP cannot be performed, as follows:

**Urgent**

- » Creatinine > 85 mmol/L.
- » ALT > 100 IU/L.
- » Pregnant women who are CrAg+, and
  - LP cannot be performed, or
  - symptomatic (headache, confusion), or
  - asymptomatic, but in the 1st trimester.

**First-line ART regimens**

Tenofovir + emtricitabine + efavirenz, oral (TEE): indication amended to <6weeks gestation or wishing to conceive again

Tenofovir + lamivudine + dolutegravir, oral (TLD): added

Aligned with 2019 NDoH PMTCT Guidelines<sup>12</sup> that recommends TEE for pregnant women <6 weeks gestation and/or wishes to conceive more children; whilst TLD recommended for pregnant women presenting at > 6 weeks gestation or who choose TLD once understanding the risk and benefits of DTG. Switching between regimens requires a suppressed viral load of less than 50 copies/ml in the last 6 months.

**Level of Evidence: III Guidelines**

Nevirapine: deleted

**NEMLC MEETING OF 30 JANUARY 2020:**

The NEMLC recommended that nevirapine not be considered as an ART regimen in HIV-infected pregnant women, due to the toxicity associated with nevirapine. It is noted that this is not aligned with the 2019 PMTCT HIV Guidelines and the NEMLC recommended that the National Programme be advised accordingly.

**HIV infected pregnant women in labour not on ART**

Nevirapine + Tenofovir +Emtricitabine, oral (single dose): deleted

Nevirapine, oral (single dose): added

Tenofovir + lamivudine + dolutegravir, oral (TLD): added

Aligned with 2019 PMTCT HIV Guidelines, noting that the HIV-exposed infant would receive appropriate antiretroviral treatment according to risk category.

**Level of Evidence: III Guidelines**

**NEMLC MEETING OF 6 DECEMBER 2018:**

The PMTCT Technical working group (TWG) presented the proposed changes to the NDoH PMTCT Guidelines to NEMLC.

The NEMLC requested that the PMTCT Technical working group provide the evidence for single dose tenofovir + lamivudine + dolutegravir (TLD) to prevent MTCT of HIV in women presenting in labour not on ART, as evidence presented was for 10-14 days of antiretroviral therapy:

*“RCT evidence<sup>13</sup> showed that at two weeks postpartum viral suppression (< 50 copies/ml) with DTG- was significantly higher compared to EFV, 69% (20) and 39% (12), p = 0.02. Pharmacokinetic data showed that 10-day DTG monotherapy reduced VL < 50 copies/mL<sup>14</sup>”.*

**Electronic discussion<sup>15</sup> after the NEMLC meeting of 6 December 2018:**

PMTCT TWG acknowledged NEMLC recommendations and proposed a “more evidence-based option” for women presenting in labour and not yet on ART:

1. A single dose of NVP, together with
2. A single dose of TLD

<sup>12</sup> South African National Department of Health South Africa. Guideline for the Prevention of Mother to Child Transmission of Communicable Infections, October 2019. <https://www.knowledgehub.org.za/elibrary/guideline-prevention-mother-child-transmission-communicable-infections>

<sup>13</sup> Orrell C, Kintu K, Coombs JA, Amara A, Myer L, et al. DolPHIN-1: randomised controlled trial of dolutegravir (DTG) - versus efavirenz (EFV)-based therapy in mothers initiating antiretroviral treatment in late pregnancy. 22nd International AIDS Conference (AIDS 2018), Amsterdam, abstract THAB0307LB, July 2018. <http://programme.aids2018.org/Abstract/Abstract/13144>

<sup>14</sup> Min S, Sloan L, DeJesus E, Hawkins T, McCurdy L, Song I, Stroder R, Chen S, Underwood M, Fujiwara T, Piscitelli S, Lalezari J. Antiviral activity, safety, and pharmacokinetics/ pharmacodynamics of dolutegravir as 10-day monotherapy in HIV-1-infected adults. AIDS. 2011 Sep 10;25(14):1737-45.

<sup>15</sup> E-mail on file: 18 December 2018 from Dr J Wessels.

**Rationale:** Evidence<sup>16</sup> exists for the effectiveness of NVP as a single immediate dose administered in labour and it therefore will remain in the regimen. FTC+TDF was used to “cover the tail” in the era where not all women were eligible for ART post-delivery. For AZT 3-hourly there was never really any evidence. It was just what we had at the time, and what was thought would be effective way back at the start of the program. However, all women now qualify for ART, and an immediate single dose of TLD provides the first dose of a lifelong regimen, and removes the need for either FTC+AZT or AZT 3-hourly during labour. cART is to be continued the following day after understanding her fertility intentions and counselling her appropriately on the risk of DTG-associated NTD for her subsequent pregnancies. TLD can be continued if she is willing to use effective contraception. Alternatively, an EFV containing regimen (TEE) can be prescribed if DTG is not appropriate.

**Level of Evidence: I Systematic review, Expert opinion**

**NEMLC accepted the updated proposed recommendation.**

ART regimens during pregnancy was tabulated, adapted from the Adult Hospital Level STG, 2019, and the 2019 National PMTCT guideline:

| <b>FIRST-LINE ART REGIMENS (Also see section 11.1 Antiretroviral therapy)</b>   |   |   |
|---|---|---|
| <b>1<sup>ST</sup> ANC VISIT</b>   |   |   |
| » Pregnant women ≥6 weeks gestation<br>» Breastfeeding women not actively wishing to conceive<br>» Those who make an informed choice to use DTG | <ul style="list-style-type: none"> <li>• TDF, oral, 300 mg daily.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• 3TC, oral, 300 mg daily</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• DTG, oral, 50 mg daily</li> </ul> <b>Note:</b> Provide as a fixed dose combination (FDC)  | » Contraindication to TDF: renal insufficiency, other nephrotoxic medicines e.g. aminoglycosides.<br>» Contraindication to DTG: pregnant women <6 weeks gestation, or actively wanting to conceive, or intolerance to DTG |
| Pregnant women <6 weeks gestation or actively wanting to conceive   | <ul style="list-style-type: none"> <li>• TDF, oral, 300 mg daily.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• FTC, oral, 200 mg daily</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• EFV, oral, 600 mg at night</li> </ul> <b>Note:</b> Provide as a fixed dose combination (FDC)  | » Contraindication to EFV: active psychiatric illness.  |
| Contraindications to EFV and DTG  | <ul style="list-style-type: none"> <li>• TDF, oral, 300 mg daily.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• 3TC, oral, 300 mg daily</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• LPV/r 400/100 mg 12 hourly</li> </ul>   | » High-risk pregnancy: doctor consult or refer immediately if acute psychiatric illness.  |
| If renal insufficiency or other nephrotoxic medicines e.g. aminoglycosides (TDF may be contraindicated)   | <u>Start alternative regimen<sup>17</sup> (Doctor consult):</u> <ul style="list-style-type: none"> <li>• ABC, oral, 600 mg, daily.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• 3TC, oral, 300 mg, daily.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• EFV, oral, 600 mg at night.</li> </ul>   |   |
| Pregnant women currently on ART   | <ul style="list-style-type: none"> <li>• Continue current ART regimen.</li> </ul>   | » Do a VL as soon as pregnancy is confirmed.  |
| Pregnant women not currently on ART but ART exposed (previous PMTCT or ART loss to follow-up)   | <u>If previous documented VL (while on ART) &lt; 50 c/mL:</u> <ul style="list-style-type: none"> <li>• TDF, oral, 300 mg daily.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• 3TC, oral, 300 mg daily</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• DTG, oral, 50 mg daily</li> </ul> <b>Note:</b> Provide as a fixed dose combination (FDC)<br><br><u>If previous VL (while on ART) ≥50 c/mL, or no VL result available:</u> <ul style="list-style-type: none"> <li>• AZT, oral, 300 mg twice daily.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• 3TC, oral, 300 mg daily</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• DTG, oral, 50 mg daily</li> </ul> |   |
| <b>2<sup>ND</sup> ANC VISIT (1 WEEK LATER)</b>  |   |   |
| Creatinine ≤ 85 mmol/L  | <ul style="list-style-type: none"> <li>• Continue FDC: TDF+FTC+DTG</li> </ul>   |   |

<sup>16</sup> Siegfried N, van der Merwe L, Brocklehurst P, Sint TT. Antiretrovirals for reducing the risk of mother-to-child transmission of HIV infection. Cochrane Database Syst Rev. 2011 Jul 6;(7):CD003510. <https://www.ncbi.nlm.nih.gov/pubmed/21735394>

<sup>17</sup> National Department of Health, Essential Drugs Programme: Adult Hospital Level STGs and EML, 2019. <http://www.health.gov.za/>

|  |   |   |
|--|---|---|
| Creatinine > 85 mmol/L (TDF is contra-indicated)   | <ul style="list-style-type: none"> <li>• Stop TDF</li> </ul> <p><u>Start alternative regimen<sup>18</sup> (Doctor consult):</u></p> <ul style="list-style-type: none"> <li>• ABC, oral, 600 mg, daily.</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• 3TC, oral, 300 mg, daily</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• DTG, oral, 50 mg daily.</li> </ul>  | » High-risk pregnancy: change to alternate triple therapy within 2 weeks (doctor consult) <b>and refer for renal dysfunction investigation.</b>   |
| VL < 50 c/mL (Pregnant women currently on ART)   | <p><u>If still on EFV-based ART, offer/switch to:</u></p> <ul style="list-style-type: none"> <li>• TDF+FTC+DTG</li> </ul>   |   |
| VL ≥ 50 c/mL (Pregnant women currently on ART)   | Continue current regimen whilst investigating and managing cause of elevated VL. Determine if the client should switch to 2nd line  | <p>» Doctor consult or refer for expert advice.</p> <p>» Pregnant women with confirmed 2<sup>nd</sup> or 3<sup>rd</sup> line ART regimen failures should not breastfeed their infants, if they can safely formula feed.</p> |
| TB GXP negative  | <p><u>If no TB symptoms:</u></p> <p>» Continue ART</p> <p>» If CD4 &lt; 350, start TPT</p> <p>» If CD4 ≥ 350, defer TPT till 6 weeks post delivery</p>  | If TB GXP negative but the patient has TB symptoms, refer for further TB investigations as in section 17.4 Pulmonary tuberculosis   |
| TB GXP positive  | <p>Continue ART:</p> <ul style="list-style-type: none"> <li>• If on DTG, increase dose to 50 mg twice daily due to drug interactions with rifampicin</li> </ul>   | If client still virally suppressed on an EFV containing regimen, continue EFV until 2 weeks after TB treatment completed  |
| <b>WOMEN DIAGNOSED HIV POSITIVE IN LABOUR</b>  |   |   |
| All unbooked women who test positive during labour should be given prophylactic ART during labour and initiated on lifelong ART before being discharged. | <ul style="list-style-type: none"> <li>• NVP, oral, 200 mg single dose as early as possible in labour.</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• TDF, oral, 300 mg daily.</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• 3TC, oral, 300 mg daily</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• DTG, oral, 50 mg daily</li> </ul> <p><b>Note:</b> Provide TDF + FTC + DTG as a fixed dose combination (FDC)</p> | <p>Before discharge:</p> <p>Start lifelong ART the day after delivery, if there are no contraindications, regardless of CD4:</p> <p>» TDF+FTC+DTG as a FDC</p>  |
| <b>POST-DELIVERY</b>   |   |   |
| The mother should start ART within 24 hours of delivery to protect the baby during breastfeeding.  | <p><u>Start lifelong ART regardless of CD4:</u></p> <ul style="list-style-type: none"> <li>• TDF+FTC+DTG as a FDC</li> </ul>  |   |
| <b>BABY</b>  |   |   |
| See Section 11.5: The HIV-exposed infant to decide whether infant is low risk or high risk and what HIV prophylactic management is needed.               |   |   |

**Level of Evidence: III Guidelines<sup>19,20</sup>**

## Viral load monitoring for 1<sup>st</sup> line regimens in pregnant and breastfeeding women

### Delivery viral load: added

Previous implementation of VL monitoring in the PMTCT programme has been suboptimal. Therefore, the VL monitoring schedule, previously linked to the ART history and timing of ANC booking, has been changed to fixed time points linked to the pregnancy itself. A VL at delivery has, therefore, been introduced for all women living with HIV. Much debate has ensued with regards to the best timing of a VL around the time of delivery. While results of a VL done at 36 weeks' gestation would be available by the time of delivery, a significant proportion of women, including those with premature labour, those with uncertain gestational age, and unbooked deliveries, would not receive a VL at 36 weeks' gestation. Additionally, antenatal care usually occurs at a different facility from delivery, and antenatal VL results may not be available at the delivery site.

A VL done at actual time of delivery has the following advantages:

- High in-facility birth rates, and previous rapid uptake and high coverage of infant birth PCR testing within labour wards, infer the possibility of near-universal coverage of the delivery-VL.
- Uniformly performed VLs at time-point of delivery will enable the health system to monitor, and better enforce, coverage of maternal VL testing.

<sup>18</sup> National Department of Health, Essential Drugs Programme: Adult Hospital Level STGs and EML, 2019. <http://www.health.gov.za/>

<sup>19</sup> National Department of Health, Essential Drugs Programme: Adult Hospital Level STGs and EML, 2019. <http://www.health.gov.za/>

<sup>20</sup> National Department of Health. 2019 ART Clinical Guidelines for the Management of HIV in Adults, Pregnancy, Adolescents, Children, Infants and Neonates. <https://www.knowledgehub.org.za/elibrary/2019-art-clinical-guidelines-management-hiv-adults-pregnancy-adolescents-children-infants>

- VL testing at delivery allows for placing of the reference to the maternal laboratory testing into the infant's Road-to-Health Booklet to provide a potential link for maternal-infant PMTCT interventions, promoting integrated care for the mother-infant pair and ensuring consideration of maternal laboratory results during infant health care provision.
- It provides a means of epidemiological surveillance of vertical transmission risk at delivery<sup>21</sup>.

Aligned with 2019 NDoH PMTCT Guidelines<sup>22</sup> and STG text was amended to:

**Viral load monitoring for 1<sup>st</sup> line regimen in pregnant and breastfeeding women:**

Newly diagnosed and initiated ART for the first time:

- Do 1st VL at 3 months on ART.
- If VL < 50 c/ml, repeat VL at delivery.

Known HIV-positive women already on ART:

- VL at first/booking visit in ANC,
- If VL < 50 c/ml, repeat VL at delivery.

Known HIV-positive women, who are not currently on ART, but are ART exposed (e.g. previous PMTCT, or ART LTFU) and who are initiating a DTG-containing regimen:

- Do 1st VL at 3 months on ART.
- If VL < 50 c/ml, repeat VL at delivery.

If the VL is  $\geq$  50 c/ml in any of the above scenarios, manage as per the VL non-suppression algorithm

VL non-suppression algorithm has been inserted below the text.

**Level of Evidence: III Guidelines<sup>23</sup>**

### 6.13 HORMONE THERAPY (HT)

#### Referral

Criteria amended to align with the Adult STGs and EML, 2019 as follows:

**REFERRAL**

- » Premature menopause, i.e. < 40 years of age.
- » Severe osteoporosis
- » Management difficulties, e.g. where oestrogen replacement therapy is a contra-indicated, poorly tolerated, or ineffective.
- » Post-menopausal bleeding.
- » If HT needed (symptoms persist) after 5 years of HT or woman  $\geq$  65 years.

**Level of Evidence: III Guidelines<sup>24</sup>**

### 6.9 MATERNAL MENTAL HEALTH

With the inclusion of perinatal mental healthcare in the Adult Hospital Level STGs and EML, 2019; the Adult Hospital Level Committee recommended that the guidance for maternal mental health be expanded in the PHC STGs and EML, to ensure continuum of care from primary to secondary level of care.

Furthermore, the Maternal Health Directorate has drawn attention to perinatal mental conditions at primary level of care, with the inclusion of a mental health screening tool in the maternal health record.

The STG was updated from:

~~Conditions affecting a pregnant and postpartum woman need to be recognised and managed because of the significant negative impact this has on the mother's ability to carry the pregnancy to term and to care for her baby. This has consequences for the health and development of the child. The unique hormonal changes, changes to sleep-wake cycles, and the stress of caring for a newborn make the peri-partum period high risk for any psychiatric disorder to manifest. Sufferers of peri-partum psychiatric conditions are at high risk for similar episodes in future pregnancies and the need for family planning should be emphasised.~~

To:

<sup>21</sup> Wessels J, Sherman G, Bamford L, et al. The updated South African National Guideline for the Prevention of Mother to Child Transmission of Communicable Infections (2019). Southern African Journal of HIV Medicine [Internet]. AOSIS; 2020 Jul 8;21(1). Available from: <http://dx.doi.org/10.4102/sajhivmed.v21i1.1079>

<sup>22</sup> South African National Department of Health South Africa. Guideline for the Prevention of Mother to Child Transmission of Communicable Infections, October 2019. <https://www.knowledgehub.org.za/elibrary/guideline-prevention-mother-child-transmission-communicable-infections>

<sup>23</sup> South African National Department of Health South Africa. Guideline for the Prevention of Mother to Child Transmission of Communicable Infections, October 2019. <https://www.knowledgehub.org.za/elibrary/guideline-prevention-mother-child-transmission-communicable-infections>

<sup>24</sup> Adult Hospital Level STGs and EML, 2019



In vulnerable women, pregnancy exacerbates the risk of developing a mental illness<sup>25</sup>. Approximately one in three women in South Africa have depression and/or anxiety in the perinatal period. Globally, postpartum psychosis affects 1 to 2 women in every 1000 after childbirth<sup>26</sup>.

Risk factors for maternal mental illness include past history of mental illness, recent major life event, (e.g. bereavement) early childhood adversity/ abuse, domestic violence, a history of trauma, displacement from home of origin, low socio-economic status, food insecurity. Women who learn that they are HIV positive during pregnancy have a particular vulnerability to mental health conditions.

Untreated maternal mental illness is associated with the following:

- » unplanned and unwanted pregnancy
- » poor adherence to health advice; poor uptake of antenatal services
- » tobacco, alcohol and other substance use
- » self-harm and suicide
- » relapse of the mental illness during the pregnancy or postpartum
- » gestational hypertension and/or diabetes
- » poor pregnancy outcomes, including preterm labour and low birth weight
- » increased risk of neonatal morbidity and stillbirth in mothers with bipolar and psychotic disorders
- » poor engagement with the infant
- » poor family relationships; paternal mental health conditions
- » behavioural and neurodevelopmental disorders in the offspring

Suspect maternal mental illness if:

- » unreliable antenatal clinic attendance
- » continued smoking and/or other substance use during pregnancy
- » any odd or eccentric speech or behaviour
- » screened positive using the 3-item tool in the Maternity Case Record

Pre-conception care:

- » Identify at-risk women – any current or past symptoms of mental illness, emotional problems, substance use, poor social support, abusive relationships, recent trauma, socio-economic deprivation.
- » Initiate management for mental disorders/ substance use/ psychosocial stress as needed.
- » Use medicines which are safe in pregnancy, unless benefit outweighs risk and patient consents to use (if valproate use, sign acknowledgement of risk form [https://www.sahpra.org.za/documents/f150bf3f6.28\\_Valproate\\_Annual\\_Risk\\_Acknowledgement\\_Form\\_Dec18\\_v1.pdf](https://www.sahpra.org.za/documents/f150bf3f6.28_Valproate_Annual_Risk_Acknowledgement_Form_Dec18_v1.pdf))
- » Discuss planning for pregnancy and initiate contraception according to individual choice.

### 6.9.1 PERINATAL DEPRESSION AND/OR ANXIETY

Non pharmaceutical management: *amended*

Sections 6.9.1: Antepartum depression and 6.9.2: Postpartum depression has been added to this section.

The following is the updated STG:

#### DESCRIPTION

See Sections 16.4.1: Depressive disorders and 16.3 Anxiety disorders, for symptoms of depression and/or anxiety. Note that these conditions may occur together in the same person.

- » Depression and /or anxiety may be antenatal or postpartum. Postpartum depression usually begins within a month of delivery but can present up to a year after delivery.
- » Anxiety disorders may present as fear of labour and childbirth, or other fears e.g. needle phobia. Such fears may interfere with antenatal and postnatal care if they are not addressed.
- » Postpartum blues last less than a week, are characterised by irritability, tearfulness, anxiety beginning by day 3-5 postpartum. Usually resolve with gentle support but may progress to depression.

#### CAUTION: Suicide

- » Highest risk period is from 6 weeks before to 12 weeks after delivery.
- » Adolescent mothers are at particular risk.
- » Those with a prior history of self-harm at particular risk.
- » See PHC STGs and EML, 2018 – section 16.7: Suicide risk assessment.
- » Inform all healthcare providers involved of suicide risk.
- » Ensure psychosocial support – partner/ family/ NGO/ welfare support.
- » Optimise treatment of mental illness.
- » Do not leave unattended if high risk of self-harm.

#### GENERAL MEASURES

##### Antenatal

- » Don't stop psychiatric medication if stable on treatment: assess course of illness, severity, and suicide risk. Refer if any signs of severity.
- » Discuss potential benefits/harms of medication to patient and baby as well as alternatives (see Adult Hospital Level STGs and EML, Sections 15.2: Anxiety and obsessive-compulsive disorders and 15.3.1: Depressive disorders).
- » Antenatal care: provide active adherence support; provide regular, frequent CHW home visits; watch for preterm labour and/or SGA baby; follow-up on any up-referral
- » Explore and address psychosocial stressors:
  - Mobilise patient's support system

<sup>25</sup> Howard LM, Piot P, Stein A. No health without perinatal mental health. *Lancet*. 2014;384(9956):1723-1724. <https://pubmed.ncbi.nlm.nih.gov/25455235/>

<sup>26</sup> VanderKruik R, Barreix M, Chou D, et al. The global prevalence of postpartum psychosis: a systematic review. *BMC Psychiatry*. 2017;17(1):272. <https://pubmed.ncbi.nlm.nih.gov/28754094/>



- Stress management/coping skills – refer for counselling e.g. at [www.sadag.org](http://www.sadag.org)
- Relationship and family issues – refer for counselling, e.g. at [www.famsa.org.za](http://www.famsa.org.za).
- Abuse or interpersonal violence - refer to a social worker and for support, e.g. by [www.genderjustice.org.za](http://www.genderjustice.org.za) or [www.powa.co.za](http://www.powa.co.za)

#### Postnatal

- » Continue close home-based support of mother and baby for at least the first year
- » Encourage breastfeeding, if not contraindicated medically
- » Optimise treatment of mental illness and comorbid physical health conditions
- » Optimise psychosocial and parenting support – utilise support groups e.g. at [www.sadag.org](http://www.sadag.org)
- » Refer to Social Welfare if suspect child-care is seriously impaired

#### MEDICINE TREATMENT

See Sections 16.4.1: Depressive disorders and 16.3: Anxiety disorders, for symptoms of depression and/or anxiety.

- » Mild to moderate anxiety – refer for psychotherapy if available and monitor response
- » Moderate – severe anxiety and/ or depression - antidepressant (SSRI) treatment for early symptom control and prevention of relapse is generally necessary

#### REFERRAL

All severe depression where functioning is severely impaired  
 Poor response to psychological and supportive Rx  
 Poor response to first line SSRI (antidepressant) medication

Factors requiring urgent admission, invoke the MHCA if necessary:

- » Suicide risk
- » Any possible psychotic features
- » Risk to infant

## 6.9.2 BIPOLAR, SCHIZOPHRENIA, AND RELATED DISORDERS

Non pharmaceutical management: *amended*

The STG was updated from:

~~Is a medical emergency and requires urgent hospitalisation.~~

#### DESCRIPTION

~~Development of bizarre behaviour and/or delusions and/or hallucinations in the month postpartum.  
 Can be due to primary psychotic disorder or delirium, but most commonly due to a severe postpartum mood episode.~~

#### GENERAL MEASURES

- ~~» Ensure safety of staff, patient and infant.~~
- ~~» De-escalation techniques and non-threatening approach.~~
- ~~» Risk assessment.~~
- ~~» Exclude delirium or general medical condition, if possible.~~
- ~~» Invoke the MHCA and sedate if necessary (see Section 16.1: Aggressive disruptive behaviour management).~~
- ~~» Social worker involvement.~~

#### REFERRAL

~~Refer all cases urgently.~~

To:

#### DESCRIPTION

See Adult Hospital Level STGs and EML, Section 15.3.2: Bipolar and related disorders for description of disorders and management and 15.5: Psychotic disorders.  
 Bipolar Disorder (BD) in perinatal period:

- » Associated with increased risk of pre-eclampsia, placental abnormalities, preterm delivery, LBW and SGA babies, neonatal morbidity, and maternal suicide.
- » Risk of relapse increased, particularly postpartum. May present with antenatal or postnatal depression, hypomania, mania or psychosis. Index episode often occurs postpartum – may be no prior history of mental illness.
- » Women with bipolar disorder have a 1 in 4 chance of postpartum psychosis

Schizophrenia and related disorders:

- » Poor pregnancy outcomes as with BD plus increased risk of diabetes, stillbirth, sudden infant death syndrome.
- » The rate of deterioration from a non-psychotic to psychotic state may be more rapid in the postpartum period than usual. Take any reports of unusual behaviour by family members as serious and urgent.

#### CAUTION: Psychosis

- » Is a medical emergency; requires urgent hospitalisation.
- » Always exclude delirium due to puerperal sepsis.
- » May present with subtle, odd behaviour and/or thoughts; women may be blunted, withdrawn, agitated, or aggressive.
- » High risk for harm to self or others, suicide, infanticide.
- » May severely impair mother-infant bonding and child-care.
- » Manage aggressive or disruptive behaviour (See Section 16.1.2: Aggressive disruptive behaviour in adults).

**GENERAL MEASURES**

- » Manage all pregnancies as high-risk in conjunction with obstetrician and psychiatrist.
- » Don't stop psychiatric medication – discuss with doctor/ psychiatrist.
- » Actively monitor adherence to antenatal care and hospital referrals.
- » Provide regular, frequent CHW home visits.
- » Arrange for hospital delivery.
- » Postpartum – keep in hospital, monitor mother and new-born, and ensure home-based care and outpatient follow-up before discharge.

Factors requiring urgent admission, invoke the MHCA if necessary:

- » Suicide risk.
- » Any possible psychotic features.
- » Risk to infant.

**REFERRAL**

All patients.