Change re Prescribing of controlled drugs by midwives
Midwifery Council of NZ Forum 2014
Quick overview history

• Concern re prolonged effect of metabolites with Pethidine (norpethidine) compared to other opioids
• NZCOM approached MC to support change to legislation (during 2010)
• Limited literature available re use of Morphine or Fentanyl intrapartum
• NZCOM consensus statement discouraged prescribing of Pethidine in home setting
• 2010 - MMPO database showed that 11% of women received Pethidine in labour
Oral Submission to Parliament

- NZCOM and Midwifery Council presented oral submission to Select committee at Parliament 5 April 2012
- Requested restrictions re Pethidine removed from Act & allow prescribing of other Opioids
Consultation

• MOH undertook initial consultation 2012
• Midwifery Council consulted
• Further consultation by MOH during 2014 –
• 25 submissions with all but 4 in favour of midwives prescribing additional opioids
Teleconference organised by Ministry of Health: NZCOM, MC, NZSA (NZ Anaesthetists), RANZCOG, ANZCA (Australia NZ College Anaesthetists), Medsafe. Discussion to reach consensus as to “named opioids” within legislation and restrictions re use – concern re ‘level’ of maternity settings where opioids administered
Legislation changed: 1 July 2014

- Medicines Amendment Act 2013
- Misuse of Drugs Amendment Amendment Regulations 2014
- Enables midwives who have completed the required education to prescribe the following controlled drugs:
  - Pethidine
  - Morphine
  - Fentanyl
- Scope of practice defined by MC - for intrapartum use only. Women requiring opioid analgesia for other indications should be assessed and referral made to the most appropriate health professional.
- Discussion re interpretation of ‘intrapartum’
Public safety: Prescribing of an opioid

- Comprehensive assessment, history
- Ensure informed consent
- Understanding of contraindications, dose, route, side effects, interactions, adverse reactions
- Ensure maternal and fetal wellbeing after administration
- **Consider** consultation if a woman requires more than one intrapartum adult dose (IV increments or IM admin) or her pain is not controlled
Public safety continued

• Prescribe one opioid only to individual woman
• Practise within local DHB / unit guidelines for prescription and administration of controlled drugs
• Prescribe in accordance with accepted best practice guidelines
• Equipment available to manage adverse reaction
• Fentanyl only prescribed in secondary/tertiary hospital (to mitigate risk re respiratory depression, apnoea)
• Documentation
Education

• All midwives need to attend a Midwifery Practice Day (2014-2017)
• For those midwives who wish to update their education and/or prescribing practice (in addition to undertaking the compulsory attendance at a Practice Day) - Able to complete a Midwifery Council approved course
So What has changed....

• Some DHBs in NZ already use Morphine or Fentanyl (Midwives prescribe Fentanyl in accordance with local DHB guidance/protocol)
• Midwives already undertaking Practice days
• Midwives have enrolled for course re controlled drugs
• DHB Midwifery Leaders considering introduction of alternative opioids
Useful website re pharmacokinetics: comparison of opioids re duration of effect and clearance

<table>
<thead>
<tr>
<th></th>
<th>Morphine</th>
<th>Pethidine</th>
<th>Fentanyl</th>
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<tbody>
<tr>
<td><strong>pKa</strong></td>
<td>8.0</td>
<td>8.5</td>
<td>8.4</td>
</tr>
<tr>
<td>Unionised at pH 7.4 (%)</td>
<td>23</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Plasma protein bound (%)</td>
<td>30</td>
<td>40</td>
<td>84</td>
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<tr>
<td>Terminal half life (hrs)</td>
<td>3</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Clearance (ml/min/kg)</td>
<td>15-30</td>
<td>8-18</td>
<td>0.8-1.0</td>
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<tr>
<td>Volume of distribution (L/kg)</td>
<td>3-5</td>
<td>3-5</td>
<td>3-5</td>
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<tr>
<td>Relative lipid solubility</td>
<td>1</td>
<td>28</td>
<td>580</td>
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