NEW ZEALAND COLLEGE OF MIDWIVES (INC)

Consensus Statement: **Prescribing and administration of opioid analgesia in labour**

The College does not advocate the use of the routine opioid analgesia for intrapartum pain relief. If opioid analgesia is used it should be used judiciously and with caution.

Rationale:

The New Zealand College of Midwives acknowledges that pain is a normal part of giving birth for the vast majority of women. In a normal labour and birth, pain is protective in that it enables the woman to prepare for, and give birth to her baby. It tells her to move to a place where she feels safe, focus on herself and call the people she trusts to be close by.

One to one midwifery support in labour is known to make a significant difference to the way in which women interpret and manage the pain they have in labour (1).

There is strong evidence that the presence of supporters caring for women at home in their own environment during the latent phase of labour is associated with a reduction in the requirement for analgesia (2). Furthermore a safe, calm, caring and drug free environment also positively influences the outcomes of labour for both mother and baby (3).

Every woman will respond to the pain of labour differently depending on her physiological, social, emotional and cultural experience and environment.

There are many non-pharmaceutical ways of supporting women to cope with labour pain when labour is building normally towards the birth. Therefore the routine use of any pharmacological analgesic medicines in normal labour is not supported.

The attitudes and behaviours of midwives have been shown to be more powerful than any other influences in helping women to cope with pain in labour (4, 5).

A systematic review demonstrated four factors that are relevant to women's satisfaction with pain management in labour. They are:

- Personal expectations
- Support from caregivers
- Quality of relationships between caregivers
- Women's involvement with decision making processes (6)

These factors override influences such as maternal age, childbirth preparation, birth environment, pain scores, immobility, medical intervention and continuity of care.

Opioid drugs have been used commonly for many years as an analgesic agent when pain is abnormal or overwhelming during labour. Pethidine, morphine and fentanyl are the only opioid drugs that a midwife can prescribe. (2014 Amendment to Misuse of Drugs Regulations 1977) (7).

The Midwifery Council statement on "The Scope of Practice of the Midwife with Regard to Prescription of Controlled Drugs" further regulates controlled drug prescribing to intrapartum use only (8).

The evidence for any opioid medicine as an effective analgesic in labour is weak, and the adverse effects on the neonate are well documented in relation to establishment of respirations and breastfeeding initiation and maintenance (9, 10, 11, 12).

Practice notes:

Midwives should be aware of the contraindications, drug interactions, effects, side effects, dose and route of administration of any opioid that they are prescribing or administering (13). Midwives should ensure that they have the skills, and immediate access to necessary equipment and narcotic antagonist to ensure any adverse effects of opioid can be mitigated. Opioid analgesia administered intravenously can have immediate and significant respiratory depressant effects on the labouring woman (14). Midwives need to be aware of the need for any additional monitoring if administering intravenous opioid analgesia.

Each woman's response to the effects of opioid analgesia will be individual, with some women more sensitive to their effects than others (14).

When opioid analgesia is indicated during intrapartum care, midwives use their assessment skills and midwifery knowledge to inform decision making in partnership with women, to determine which opioid analgesic is the most appropriate (14, 15, 16, 17, 18). This decision will be informed by:

- The woman's wishes
- The progress of, and reaction of the baby to labour
- The setting, including the possible need for transfer from a primary setting and the pain relief that may be required

The interval between the administration of a opioid drug to the time of birth is important (14). Whilst the time of birth can be hard to gauge, a comprehensive assessment will include consideration of this, in determining the most appropriate analgesic, dosage and route of administration.

When the decision is made to administer a particular opioid, it is recommended that no other type of opioid is also prescribed or administered. Giving multiple doses of any opioid will compound the impact on the newborn and is not recommended.

The College strongly discourages the use of opioids during labour at home.

The College recommends midwives discuss the following points with women if they are considering using a opioid for pain relief in labour:

- The benefits, actions and side effects of pharmacological and non- pharmacological analgesia should be discussed antenatally, including whether the woman has any allergy or sensitivity to opioids. If this is not possible then discussion and consent for analgesic use should be gained before administration to the woman in labour (14, 15).

- Opioids cross the placenta and can have a depressive effect on the establishment of the baby's respirations at birth. This can be reversed in the short term by the administration of Naloxone. However the reversal action of Naloxone may be of a shorter duration than the depressant effect of the opioid. This may lead to delayed onset of respiratory depression. (14, 16, 17, 18, 19).

- Some opioids are broken down by the body into metabolites, which also have side effects. Metabolites can also cross the placenta. Following the administration of opioids to a woman in labour, the baby may receive maternal metabolites as well as beginning to produce its own. (16). The immaturity of a baby's liver means that it may take several days to eliminate the metabolites of some opioids from its body (14). Findings suggest it is undesirable to administer some opioids in early labour because of these effects (14). Other measures to assist the woman manage pain in early labour should be provided.

- Studies have demonstrated unequivocally that breastfeeding is affected by exposure to opioids and the baby's ability to initiate and sustain breastfeeding (9, 10, 11, 14).

- If opioids are administered in labour both the woman and the baby require extra monitoring during labour and following birth to assess for potential respiratory depression or other adverse effects.

References:

1. Sandall J, Soltani H, Gates S, Shennan S, , Devane *D Midwife-led continuity models versus other models of care for childbearing women*
   The Cochrane Collaboration August 2013 Retrieved from http://onlinelibrary.wiley.com April 2014
2. Davey M, McLachlan D, Forster D, Flood M. *Influence of timing of admission in labour and management of labour on method of birth. Results from a randomised controlled trial of caseload Midwifery (COSMOS trial).* Midwifery, December 2013 Vol 29, Issue 12, pages 1297 – 1302
3. Leap, N., Newburn, M. Working with pain in labour: an overview of evidence.: The NCT New Digest publication for parent- centred midwifery NCT publication for parent-centred midwifery 2010:6:9-12
4. Page Lesley *One-to-One Midwifery: Restoring the "With Woman" Relationship: Literature Review: Outcomes of Continuity of Carer* Journal of Midwifery & Women's Health Volume 48, Issue 2, pages 119–125, March-April 2003
5. Leap N, Sandall J, Buckland S, Huber U. *Journey to Confidence: Women's Experiences of Pain in Labour and Relational Continuity of Care* Journal of Midwifery & Women's Health Volume 55, Issue 3, May–June 2010, Pages 234–242
6. Hodnett E. *Pain and women's satisfaction with the experience of childbirth: A systematic review.* American Journal of Obstetrics and Gynecology. Volume 186, Issue 5, Supplement, May 2002, Pages S160–S172

7. 2014 Amendment to Misuse of Drugs Regulations 1977), New Zealand Government Legislation. Retrieved from http://www.legislation.govt.nz/regulation/public/2014/0199/latest/DLM6156050.html July 2014
8. Midwifery Council statement "The scope of practice of the midwife with regard to prescription of controlled drugs". Midwifery Council of New Zealand 2014. Retrieved from http://www.midwiferycouncil.health.nz/prescribing-of-controlled-drugs-by-midwives/ July 2014
9. Ullman R[1], Smith LA, Burns E, Mori R, Dowswell T. Parenteral opioids for maternal pain relief in labour. Cochrane Database Syst Rev. 2010 Sep 8;(9):CD007396. doi: 10.1002/14651858.CD007396.pub2.
10. Sue Jordan *Infant feeding and analgesia in labour: the evidence is accumulating* International Breastfeeding Journal. 2006; 1:25
11. Judith H. Poole Analgesia and Anaesthesia during labour and birth: implications for mother and fetus. JOGNN 2003 Nov-Dec;32(6):780-93.
12. Sosa C., G., Buekens, P, Hughes, J., M., Balaguer, E, Sotero, G, Panizza, R, Piriz, H and Alonso, J.,G. *Effect of pethidine administered during the first stage of labour on the acid–base status at birth* Science Direct. European Journal of Obstetrics and Gynaecology. http://www.sciencedirect.com/science/article/pii/S0301211505006755 Retrieved July 2011.
13. Prescribing Guidelines, New Zealand College of Midwives, 2014
14. Anderson, D. *A review of systemic opioids commonly used for labor pain relief.* Journal of Midwifery and Women's Health. Vol 56, No 3, May/June 2011
15. *Handbook for Practice.* New Zealand College of Midwives. 2008
16. Mesdafe medicine datasheet *Pethidine Hydrochloride injection* http://www.medsafe.govt.nz/profs/Datasheet/dsform.asp Retrieved April 2014
17. Medsafe medicine datasheet *Fentanyl injection* http://www.medsafe.govt.nz/profs/Datasheet/dsform.asp Retrieved April 2014
18. Medsafe medicine datasheet *Morphine injection* http://www.medsafe.govt.nz/profs/Datasheet/dsform.asp Retrieved April 2014
19. Medsafe medicine datasheet Naloxone Hydrochloride injection http://www.medsafe.govt.nz/profs/Datasheet/dsform.asp Retrieved April 2014

Bibliography

Title: Prescribing of drugs unapproved for use in maternity care or for the newborn
Author: New Zealand College of Midwives 2010

Title: Labour analgesia and the baby: good news is no news
Author: Felicity Reynolds
Source: International Journal of Obstetric Anaethesia. Vol 20. Issue 1. Pages 38-50. Jan 2011

Title: The role of pain in normal birth and the empowerment of women
Author: Leap N, Anderson T
Source: Normal childbirth: evidence and debate. 2nd edition. Edinburgh:Churchill Livingstone; 2008. pp. 29-46

Title:	Intrapartum care of healthy women and their babies during childbirth Clinical Guideline
Source:	National Collaborating Centre for Women's and Children's Health National Institute of Clinical Excellence NICE September 2007

Ratification:

This statement was ratified at the NZCOM AGM on 28/08/14

The purpose of New Zealand College of Midwives Consensus Statements is to provide women, midwives and the maternity services with the profession's position on any given situation. The guidelines are designed to educate and support best practice.
All position statements are regularly reviewed and updated in line with evidence-based practice.