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**EDITORIAL**

# Sustainable midwifery practice

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The terms 'sustainable' and 'sustainability' have become catch phrases these days. We hear about sustainability in so many spheres. Sustainable environments, sustainable transport, sustainable cultures, sustainable economic policies… the list goes on. There are questions as to whether the human species will be able to be sustained on so many levels. These questions apply both globally in terms of environmental devastation, climate change and overconsumption, and locally, in terms of sustainable culture, business, work and social structures.

When I searched for a definition of sustainability, I found that the word is derived from the Latin sustinere (tenere, to hold; sus, up), and Dictionary.reference.com defines sustainability as: "the ability to be sustained, supported, upheld, or confirmed". According to the New Zealand Ministry for the Environment sustainability "is about meeting the needs of today, without adversely impacting on the needs of tomorrow". While we often think of sustainability in ecological terms, in more general terms, sustainability refers to the endurance of systems, processes and practices and whether they will be preserved, both in the present and in the future. If we do not pay attention to sustainability then the risk is that our systems, processes and practices, whether they be environmental, social or professional, will not stand the test of time?

In terms of the New Zealand model of midwifery, it is important to explore sustainable practice so that individual midwives and the profession as a whole can be maintained and supported and therefore endure in the future.

This issue of the NZCOM journal contains five articles, two of which explore very timely practice issues. Alison Andrews and colleagues have analysed MMPO data to explore trends in smoking prevalence for women in NZ. The findings suggest that cessation messages and support need to be targeted especially to young women, multiparous women and women of Māori ethnicity. A very pleasing reduction in rates of smoking has been identified. Chloe Goodson and Ruth Martis' article about the use of Pethidine for pain relief in labour is very relevant given the move to the use of alternative opiates in New Zealand.

The other three articles in this issue are written by midwives who have explored different aspects of what sustains midwifery practice. One of the key themes which runs through these articles is that it is relationships – relationship with women and relationship with colleagues – which sustains. While midwives are inspired and sustained by partnership and reciprocal relationships, these three articles discuss the need to negotiate boundaries and ensure that midwives professional and personal lives are integrated and balanced.

It is important to explore sustainable practice so that individual midwives and the profession as a whole can be maintained and supported and therefore endure in the future.

Heather Donald and colleagues explore midwives' experiences of creating a better work life balance, and their findings include the suggestion that empowered relationships with women will be more conducive to work-life balance than a close protective relationship. The finding of Judith McAra Couper and colleagues' study of what sustains Lead Maternity Carer (LMC) midwives in practice long term, is that it is having a passion for being with women and families and supporting them through their childbirth experiences. For the LMC midwives in this research partnership and reciprocity are what sustain their joy in midwifery practice.

Debbie Macgreor and Liz Smythe have written about what happens when the midwifery/woman partnership breaks down. The authors analyse a case study of a situation when a midwife-woman partnership broke down. Implications for practice arise from the analysis and principles distilled, which may provide an appropriate and professional process for midwives on the rare occasion they need to end the partnership.

There is so much for us to learn about how to sustain ourselves personally and professionally, and I am sure there will be something for everyone to reflect on from the research and scholarship clearly evident within the New Zealand midwifery profession.

## NEW ZEALAND RESEARCH

# Creating a better work-life balance


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## ABSTRACT

Co-operative inquiry, an action research approach, was selected to investigate the work-life balance of 16 caseloading midwives living in Auckland. For some of the midwives the tension between their professional and personal commitments was at times hard to control, as they believed they needed always to be there for the women in their care. Thus burnout was a risk from the continuous on call nature of their role.

The participants met with the researcher in a series of focus groups for dialogue and inspiration as they evaluated their individual practice assumptions. Thus together they became co-participants and co-researchers in the study.

The midwives reflected on and re-evaluated their assumptions about their practice roles and in particular their relationships with women and with colleagues.

Resolutions to make and sustain change involved weighing up the options available and stepping out to create new relationships and new ways of working. Further, the findings in the study lead to the development of a work-life balance tool for midwives.



## KEY WORDS

Caseloading, continuity of care, personal well-being, reflexivity, action change, work-life balance


## INTRODUCTION

To be a caseloading midwife with sole responsibility for the primary pregnancy care of a woman - known in New Zealand as Lead Maternity Carer (LMC) - involves providing her antenatal, labour and postnatal care and that of her baby until six weeks after the birth (Ministry of Health, 2007). It involves being responsive around the clock to the maternity needs of the women in their care. The specifications for primary maternity care are set out in Section 88 of the New Zealand Public Health and Disability Act (Ministry of Health, 2007). Their contract requires that the LMCs or their back-up "will be available 24 hours a day, 7 days a week to provide phone advice to the woman and community or hospital-based assessment for urgent problems, other than acute emergencies" (Ministry of Health, 2007, p. 1060). Midwife LMCs make up 41% of the midwifery workforce and care for an average of 47 women per midwife each year (Ministry of Health, 2010). The New Zealand College of Midwives promotes the philosophy of continuity of care recognising it as enhancing partnership with women (Guilliland & Pairman, 1995) – a philosophy confluent with the LMC model.

National satisfaction surveys show that women receiving continuity of care during childbirth report greater satisfaction (Ministry of Health, 2008). They also experience fewer interventions and have better outcomes ensuring the cost effectiveness of their care. (Ashton, 2005; Saultz & Albedaiwi, 2005; Saultz & Lochner, 2005; Waldenstrom, 1998). Thus, LMC midwives, as the primary care providers, appear to have achieved both the cost containment of maternity services and met the consumer demand for woman-centred care.

Although the provision of continuity of care improves the satisfaction for women, for some LMC midwives providing this service comes at a personal, emotional and physical cost (Caza, 2007; Young, 2011). Despite most midwives having effective strategies for sustainable practice (McAra-Couper et al.) changing circumstances can make it a struggle to maintain the balance between their work and their personal life. (Donald, 2012). What follows is the report on a research study that used cooperative inquiry methodology to explore how a group of Auckland LMC midwives could adjust their work to support an improved work-life balance. These midwives wanted to find a way to provide continuity of care while sustaining their own well-being. Through their experience of participating and sharing in this action research these LMC midwives were inspired and enabled to make changes. As co-researchers and co-participants they worked through cycles of reflection and individual action change in collaboration and dialogue with their colleagues (Heron, 1996).

## RESEARCH DESIGN

Action research methodology is derived from critical social science and is used in many organisations and institutions as a vehicle to effect change. It is about practitioners investigating their own practice on the job, describing their interventions, and providing evidence of improvement (McNiff, 1988; McNiff & Whitehead, 2006). LMC midwives can choose how and when they work but must meet the requirements of the Section 88 contract and the Standards of Midwifery Practice (MOH 2007, NZCOM, 2008). Thus they can identify what needs to be changed in their practice and implement the resulting modification.

Cooperative inquiry comes under the umbrella of action research and was selected as the guiding methodology for this research. It is a term coined by Heron (1996) who developed this research approach to provide personal and social transformation through increased self-direction in living. It is also about wholeness, where everyone is part of the whole, where everyone participates through collaboration and dialogue working as co-subjects and co-researchers (Heron, 1996). Alongside cooperative inquiry, the principles of appreciative inquiry were used to enrich the project through the amassing positive accounts of what was working well and, by building on these strengths, enabling participants to envision and create a better future (Cooperrider & Whitney, 2005). These approaches were the foundation for the practical, philosophical, participatory and reflexive properties of the study and the democratic standpoint that addressed power and knowledge.

Ethical approval for this study (Number 08/11) was granted by the Auckland University of Technology Ethics Committee in April 2008.

The research was guided by a doctoral student (the lead researcher). As an LMC midwife she was also concerned about her work-life balance and able to be wholly engaged with the field of inquiry as a full co-subject and co-researcher (Heron & Reason, 2007). Fifteen other caseloading midwives joined the study after responding to an invitation distributed through the New Zealand College of Midwives Auckland region's global email list.

The participating LMC midwives came from both rural and urban areas. Midwifery practice experience ranged from those new to LMC practice, to those who had practised as LMCs since the early 1990s. Their ages ranged from 24 to 60 years with the average age being 48.4 which aligns with the current average age of the New Zealand midwifery workforce of 47.2 years (Midwifery Council of New Zealand, 2011). Māori and European ethnicity New Zealanders were represented alongside midwives who have emigrated here. As with their age, their nationalities also aligned with the latest midwifery workforce data (Midwifery Council of New Zealand, 2011).

## Methodology and analysis

Over a period of 20 months the midwives completed four cycles of collaborative evaluation, reflection and subsequent action in their individual practices. Each midwife identified the issues affecting her work-life balance supported by collaboration and consultation with her focus group colleagues. In each cycle they implemented and reviewed changes they felt necessary in their individual practices.

Focus groups met once in each of the four cycles. Each session lasted two hours and the discussion was audio recorded. Where a midwife was unable to attend a focus group, the researcher made contact to update her on the ideas and topics discussed. Between the focus group sessions, the lead researcher kept in contact by phone or email with each participant to discuss the impact of changes in their individual work settings. The midwives kept journals to help them reflect on the changes they were putting in place.

Data sources for the study included the recorded focus group sessions, individual interviews with midwives not attending the focus groups, and hand written and electronic notes from the phone and email conversations. All audio recorded data were outsourced privately for transcribing following a signed confidentiality agreement with the private transcribers and consented by the participants.

The lead researcher immersed herself in the data by reading and re-reading the transcripts and listening to the audio recordings to ensure all that was being said, was heard. Information was manually grouped into different categories. Patterns of relationships within and between the categories were identified about the reasons why the midwives felt they needed to change their practice, and how they went about making the changes (Heron, 1996; Krueger & Casey, 2000). Changes were already in progress for some of the midwives at the time they joined the enquiry group. For others, change began during the research project.

A reflexive stance was adopted to address issues of rigour and validity. Lash (1993) states that for reflexivity to occur there needs to be a subject, an object, and a medium of reflection. In this study the reflecting subject was the individual midwife as she examined herself and her practice through the medium of action research. The objects of the reflection were the norms of the structures within which the midwives practised-—for example, their philosophy and standards of care.

## FINDINGS: The midwives and action change

The findings of an action research study are about the participation, the process and any change that may result. In this study the nature of the process and the change was particular to each midwife. Some midwives made radical changes to how they organised their time while others chose to maintain the status quo, albeit with a richer insight into their personal and practice habits. The findings therefore describe how each midwife responded, revealing the uniqueness and complexity of their individual situations. To protect the identity of the participants, pseudonyms have been used.

The first theme revealed a tension that arose between the allegiance the midwife believed she had to the woman and the need to meet her own personal commitments.

Three main themes were identified to show how change evolved: a tension between work and home commitments; changing assumptions about commitments; and sustaining practice change. A summary of the journey of each LMC midwife in the study is presented. The stories are grouped under the theme that best represents the effect cooperative inquiry had on their work and personal lives.

The first theme revealed a tension that arose between the allegiance the midwife believed she had to the woman and the need to meet her own personal commitments.

### Tension between work and home commitments

**Cherry** worked as an employed caseloading team midwife. When Cherry's practice partner left the team, Cherry chose to work on call 24 hours/7 days a week (24/7) instead of having her usual two days off per week. She had thought this was a good way to provide care for women until she realised that her life had been over taken by the constancy of being 'on-call'. Change of mind-set: Discussions in the focus groups prompted Cherry to give herself permission to be released from certain ideals she had held about continuity of care and partnership. Realising it was acceptable and necessary to have time off she was no longer driven by, and was released from, a deep sense of guilt.

With her combination of work and family commitments **May** considered that she had a busy lifestyle but would like to manage it better. She worked 24/7 on call in a group having cover (using a back-up midwife) only for an important event or an occasional weekend off. Adopting strategies: May's focus during the research was to work at streamlining her practice to fit around her personal needs. Weighing these up and considering what she heard in the focus group discussion she decided that the beauty of being 'her own boss' rather than having set days off gave her the opportunity for spontaneity and flexibility in her day time activities. For now this suited her best.

Living in a rural area can mean less cover available to have regular time off. **Skye** was fortunate to have other LMC midwives in her area who were keen to share a caseload to enable more planned time off. There were times though when they were stretched to their limit as their booking numbers each month fluctuated and they had no control over when women birthed. Minimal change: The study involvement provoked Skye to consider sharing a caseload to get regular down time. However Skye felt

that the satisfaction she received from her on-call care provision would be diminished if she shared a client load. She chose to continue to provide 24/7 care using locum cover for arranged blocks of leave during the year. To assist with this she received assistance through the rural locum relief support fund available through the New Zealand College of Midwives (Health Workforce NZ, 2011).

An employed caseloading midwife, **Mariana**, joined the cooperative inquiry to get ideas for managing her practice life. At times her work load seemed unmanageable and she was unable to provide fully all of the aspects of care she felt the women needed. She often had high-risk clients in her caseload which placed a greater demand on her time. Listening to how others were thinking and making changes Mariana realised she needed to take control of change in her practice if she wanted to make a difference. A lowered caseload: Mariana collected and collated data to present to management that showed how high risk clients needed more frequent visits and longer sessions. Subsequently the caseloads were lowered for those who carried high risk women.

For **Kathryn** 'continuity of care' meant 'one midwife to one woman' and so stayed on-call with only occasional time off. Changes in her family life were coming up that could threaten her on-call availability. She had been considering whether she needed to move to a 'shift based' midwifery position with regular and predictable hours. Explored possibilities: The action research project opened up new possibilities for Kathryn to explore as she pondered how she could make her current practice more sustainable in the future.

Caught between a desire to be a LMC midwife and the need to be a mother and grandmother **Bronwyn** joined the group to try and find an answer to this dilemma. Relinquishing LMC practice: Bronwyn evaluated her philosophy about caseloading practice and chose to work with regular time off. She was unable to find a permanent midwifery partner or group for the backup she required and decided not to continue in LMC practice.

## Changing assumptions about commitments

The second theme showed that for successful change to occur the midwife needed to change assumptions surrounding her commitments to the woman and to herself.

Being on-call 24/7 for **Evelyn** was not only about being with a woman any time during the day or night for a birth but also meant going to a woman's home in the middle of the night to help with breastfeeding. Evelyn's passion to be there for women had obsessed her. It had become unsustainable for her and tiredness was threatening to make her practice unsafe. Developing team philosophy: Evelyn formed a team and they worked on building continuity of care through a 'shared philosophy'. They provided the same information to women and had the same approach to the midwifery care. When Evelyn was off call she knew the women in her caseload would receive the same level of support from her backup that she would have provided.

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Life was losing its pleasure for **Joan** who had come to the point where her on call availability meant she was neglecting herself. She struggled to maintain personal activities in her life. Her participation in this research project opened up her thinking to pursue a change in the philosophy about how she had worked for many years. Getting regular days off: Joan was fortunate in the timing and two other midwives in her area coincidentally wanted to have regular time off.

An important consideration for **Rose** was not letting her midwifery practice dominate her life to a point where it prevented her from spending time with her family and friends. This was complicated though as she needed a regular income and in her rural area the number of women birthing was low. This tempted Rose to stay on call as her other colleagues often did. Empowering women: Rose identified that women needed to be empowered to rely on their own abilities and family support rather than be dependent on a particular midwife. Over time, as she stayed true to her ideals, she set an example to her practice colleagues as they slowly came to the same realisation that regular time off call was important for their well-being.

The project gave **Rachelle** the opportunity to observe the conflict that occurred in the lives of other midwives whose commitment to being on call for women put them at risk of neglecting their personal well-being. Achieving regular days off: Rachelle became aware of the importance of having regular and predictable time with her partner so that they did not develop separate lives and grow apart. She changed her on call philosophy of care 24/7 to one of providing continuity of care with regular days off call each week.

The focus group encounters provided a catalyst for the LMC midwives to re-evaluate their philosophy of practice and assumptions about how they managed their midwifery practice. **Janet** had a good off call arrangement with another midwife but still felt her workload could be managed more efficiently. Time management: Janet reduced the frequency of her antenatal and postnatal visits in line with recommended best practice which dramatically freed up her time.

## Sustaining practice change

Finally, when the LMC made a practice change, a concerted effort was needed to adapt to the new ways of thinking and to sustain the practice change.

A commitment to family for **Robyn** superseded any consideration of working on call 24/7 for long periods of time. Fortunately Robyn knew two other caseloading midwives wanting to be in a structured team for regular time off call. However working in a group brought communication issues. Building team solidarity: Robyn learnt to raise any issues that were preventing her from being honest with other members. If disputes were not dealt with promptly, resentment could build up over time affecting colleague relationships.

After providing on call care 24/7 for several years **Margie** felt she had 'burnt out'. Her marriage suffered and she felt alienated from her children. After a year off she came back to LMC midwifery but needed to be able to say to her family regularly, "I'm off call tonight". Learning to be a team player: Margie commenced employment working in a team providing on call care with weekly structured time off. Being involved in the study gave her insight into many of the practice issues she faced. Margie no longer adhered to the 24/7 philosophy she had believed in and was now learning to work in a team, a 'letting go' of her previous way of doing things.

To work in a team with scheduled time off and only work two to three days on call at a time were ideal for **Ellie** while she had young children. However her team had a conflict of values that had profoundly affected team cohesion. Some midwives placed more emphasis on providing

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'continuity of carer' rather than 'continuity of *care*'. Addressing group issues: Through the discussions and support in the focus groups Ellie felt confident to work on group dynamics in her practice. She realised that improved communication would achieve better relationships and the ability to align philosophies.

At the point of burnout **Mary** had to relook at joining a team for regular structured time off call. Becoming part of a team: An opportunity presented to work with two other midwives who also wanted to provide caseloading care with structured time off. She had worked in a team before but they had not been able to 'keep it together'. Participation in the research project gave Mary a platform to explore ideas to enable her to work on consolidating her team. Communication became an essential feature in the team. Regular meetings were held with an agenda and written records to reduce unnecessary conflict.

To work as a LMC midwife on call 24/7 was no longer sustainable for **Lorraine**. The constant periods of extreme tiredness after a birth and still being on call with unpredictable down time had become stressful. Adapting to a team approach: Lorraine changed to working in a group with regular days off. Yet she still did not achieve the satisfaction she thought she would. Lorraine experienced guilt when she was not available for her clients. The group discussions helped Lorraine realise she had created a dependent relationship with the women and not one of empowerment. If she was not at a client's birth she would feel disappointed which added to the guilt she experienced for not being there. Lorraine's focus of change during the project was to completely let go of her old way of thinking and to trust her colleagues more; the inspiration from others in the group enabling her to achieve this change.

This research demonstrates that the well-being of the LMC midwife can be affected in various ways. Tension between the midwife's professional and private life can affect her ability to sustain a practice long-term. Important factors threatening a balanced work-life arrangement were identified.

- the type and size of the caseload a midwife was carrying, e.g. low versus high risk clients
- being a rural LMC with a fluctuating caseload
- the robustness of the group structure for support and back-up
- how organised and self-aware the midwife was in the day-to-day running of her practice
- the quality of the interpersonal relationships in the midwifery team.

## DISCUSSION

The LMC midwives in this study recognised how they struggled with managing their work-life balance. Some even talked about having experienced burnout. Their experiences reflected that of LMC midwives in other New Zealand research (Young, 2011) but these latter midwives had reached a point where they had felt powerless to get the support they needed. Their lives were put on hold and they felt incapacitated to work. In contrast, the midwives who participated in this current study had come to recognise their risk of burnout and were eager to find strategies to avoid it.

A common theme in this current study was the midwives' commitment to women's care; in particular they embraced the principle of continuity of care. Crossley (2005) suggests "society creates the social agent, who then recreates society" (p. 112). In a similar way the midwives were recreating what they believed was the only correct ethical way to provide continuity of care to women. The midwife participants sought to change their practice so as to be able to continue to provide continuity of care to meet the New Zealand College of Midwives Standards of Practice (NZCOM, 2008). The midwives who changed, from being on call 24/7 with only occasional time off, to having set days off, were mindful of their commitment to continuity of midwifery care. To the best of their ability they organised their practices so that the women in their caseload had an on-going relationship with the LMC and her back-up for the duration of their care. However, two midwives after reflection, decided that the flexibility of remaining on call suited them better than working in a team environment.

Some of the midwives who chose to work in a team providing continuity of care found that 'trusting relationships' with their colleagues were essential to achieving a better work-life balance. Team work provided newfound collegial support where previously, working with their individual caseload, they had felt isolated. In a recent Australian phenomenological study of a midwifery group model of practice, Moore (2009) interviewed midwives who set up team caseloading care that enabled women to be cared for by known midwives. Essential elements emerged which were similar to the findings of this study. These included attention to work-life balance, a shared group philosophy, the advantages of peer support, and a culture of trust.

Working in a team brought new challenges. Conflict arising between team members was often difficult to resolve and, where it was not dealt with early, could cause ongoing resentments. In his Canadian research, Bearden (2009), a registered nurse and health care manager, wanted to determine how training in constructive conflict resolution could benefit nurses. Using a naturalistic inquiry methodology Bearden interviewed ten nurses and three midwives to gain an understanding from their respective perspectives. The findings showed that unresolved conflict seriously hampers the relationships in a group and can even lead to burnout. Barriers that prevent effective resolution in times of dispute were identified by Gerardi (2004). He noted that these include: "time constraints, inadequate access to information, poor communication structures, unclear roles, conflicting policies, diversity of education/experience of clinicians, power imbalances, practice variations, high stakes, emotionally charged situations, and fatigue" (p. 183). The LMC midwives in this research project, who were faced with conflict in their practices, learnt from others in the research group how to address some of the factors cited by Gerardi. In particular addressing the time issues, group structures and communications strengthened them to face up to, and deal with, their particular conflict issue.

## THE WORK-LIFE BALANCE TOOL

As a direct result of the cooperative inquiry, a work-life balance (WLB) tool has been developed. This is to assist a midwife to assess her well-being and recognise when she might need to make changes in her practice (Figure 1). This WLB tool is designed to make the caseloading midwife stop and 'think'. It is to help her measure how effective she is at integrating her personal needs around her on call work. It is then up to the individual midwife to decide if she needs to make changes. It could also be used

## Work-life Balance (WLB) score for the LMC midwife

Name..... Date.....

### ARE YOU IN THE RED, YELLOW OR GREEN ZONE?

*Select the closest description or add your own to fit your situation*

| Points | 0 | 1 | 2 | Subtotal<br>Choose a point from each criteria |
|---|---|---|---|---|
| **Personal relationships** | Not enough time for family<br>No social life<br>*Or*..... | Difficult to plan activities with family and friends<br>*Or*..... | Enjoy planned time to spend with family and friends<br>*Or*..... | |
| **Time off call** | Difficult to get cover<br>*Or*..... | Some cover but not as often as I need it<br>*Or*..... | Regular cover for days off<br>*Or*..... | |
| **Group/team work** | Work on my own but struggle<br>*Or*..... | Tension between members<br>Some conflict difficult to resolve<br>*Or*..... | Great team work and support<br>Or<br>Happy working on my own and have support if needed<br>*Or*..... | |
| **Physical wellbeing** | Not enough sleep<br>No recreation<br>Poor eating habits<br>*Or*..... | Struggle at times to catch up on sleep<br>Irregular recreation<br>Irregular eating pattern<br>*Or*..... | Able to catch up on sleep<br>Regular recreation<br>Healthy eating<br>*Or*..... | |
| **Life satisfaction** | Life is a constant struggle<br>*Or*..... | Feel up and down<br>Feel guilt if not available for women<br>*Or*..... | Life feels great<br>*Or*..... | |

| | | |
|---|---|---|
| **0-3: Red Zone** | **Life needs urgent attention! Intervene now before possible burnout.** | **Total Score** |
| **4 to 7: Yellow Zone** | **The work-life balance needs some attention. Life could be better. Continuing like this could make continuity of care difficult to sustain long term.** | |
| **8 to 10: Green Zone** | **Well done! A great work life balance. There is enough time for work and enough time to have a personal life and to enjoy both.** | |

***Figure 1***

as part of professional supervision, or within a group meeting, to assist midwives to recognise early indications of work and lifestyle stress. )

## CREATING AN OPTIMAL WELL-BEING CULTURE

Many of the midwife participants began caseloading practice committed to the idea that the women came first and that they needed to be on call 24 hours, seven days a week. The cooperative inquiry research process enabled them to evaluate their assumptions about their practice and personal philosophies. They strategized to find a work-life balance that suited them in order to enhance their personal well-being, while still providing continuity of care for women.

LMC midwives have a professional responsibility to reflect on, and have strategies to care for, their own well-being. The Midwifery Standards Review (MSR) is a good starting place for this to occur as all LMC midwives are required to participate to maintain their practising certificates (Midwifery Council of New Zealand, 2012; Ministry of Health, 2003). The MSR is also well situated to provide reviewers with the opportunity to monitor and promote a culture of optimal self-care. This thinking is supported by Halldorsdottir and Karlsdottir (2011) in their research on professional caring which concluded by recommending that professional bodies should not just focus on cognitive and practical competences, but also on the evaluation of attitudes, interpersonal competence and self-care.

The midwives in this study have shown that LMC midwives can benefit from a structured reflective process to examine how they work and think. Using the principles of cooperative inquiry further peer review activities could be developed to support midwives needing to make practice changes to achieve a better work-life balance. Assessing personal well-being is ongoing. Awareness of the principle of establishing a sustainable life-work balance needs to start with midwifery students. Networking within and across geographical areas would provide opportunities for midwives to choose practice groups settings best suited for their needs. Most importantly, midwives need to develop good communication skills to negotiate and achieve effective practice change. Education sessions which encourage strategies for dealing with conflict, and skills for constructive conversations are desirable if midwives are to work within a culture that is self-preserving, not self-sacrificing.

## CONCLUSION

This cooperative inquiry project was prompted by the desire of 16 New Zealand LMC midwives seeking a better work-life balance. The potential for being called out at any time impinged on their well-being and exposed them to the possibility of burnout. The tensions between their professional and personal commitments were at times hard to tolerate and some suffered from guilt if they could not 'be there', at all times, for the women in their care. To succeed in creating innovative ways to practise, the participants agreed that they needed to change their assumptions about how they provided care. This required adopting an empowering approach to care focussed on the woman's ability to cope rather than allowing the development of a dependent relationship between the woman and the midwife. The project has led to the design of a work-life balance score tool for midwives to self-monitor their well-being. All midwives, from the clinical practitioners themselves to the leaders and educators, need to act as change agents, to promote skills for work-life balance awareness so that everyone enjoy sustainable, safe midwifery practice while still honouring the principles of partnership and continuity of care.

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PRACTICE ISSUE

# When the midwife-woman partnership breaks down – principles for ending the relationship


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## ABSTRACT

New Zealand's unique Lead Maternity Carer (LMC) midwifery model of practice is a privilege for both women and midwives. Underpinning this model of practice is the concept of partnership. The midwife-woman relationship has been identified as the key sustaining element of one-on-one midwifery care. However practice experience reveals the potential for this key relationship to break down. This becomes a particularly complex and conflicting challenge when the midwife recognises that for her own professional safety she needs to unilaterally end the midwife-woman relationship.

Of paramount importance to a healthy functional partnership is mutual trust, respect and reciprocity. There is a taken for granted assumption that trust can be established and maintained, that there is willingness for sharing on both sides and a reciprocal respect. When trust is eroded or irretrievably breaks down, the health and survival of the relationship are threatened, and the alliance has the potential to become unstable and unsafe. Consequently the midwife may decide to end the relationship. A framework, to help navigate and support the midwife who is experiencing this distressing challenge, does not exist.

A case study, explored through descriptive interpretive analysis, is used to present one of the author's experience of a breakdown in the trust relationship. Analysis of the experience reveals the intuitive process this midwife utilised, to ensure she upheld her professional responsibility as well as maintaining her self-worth and integrity. Implications for practice arose from the discussion and principles were distilled. These may provide an appropriate and professional process for midwives on the rare occasion they need to end the partnership



## KEY WORDS

Midwife, woman, relationship, trust, breakdown of trust, guiding frameworks


## INTRODUCTION

Challenging situations in midwifery can be many and varied - small and easily resolved or so large they feel insurmountable, threatening the emotional and professional well-being of the midwife (Pelvin, 2010). This is particularly applicable to Lead Maternity Care (LMC) midwives who work autonomously within the community, some more isolated than others, all without the equivalent of an institutional hierarchical structure to turn to for guidance and support let alone protection. A particularly complex challenge comes when the midwife recognises that, for her own professional safety, she needs to unilaterally end the midwife-woman relationship.

This paper presents a challenge related to the "cornerstone" and very essence of New Zealand (NZ) midwifery care: partnership. The intention is not to challenge the concepts of partnership, but to provide an opportunity to reflect on what Cox and Smythe (2011) suggest is a paradox, in that by truly upholding this concept, complex challenges will occasionally but inevitably manifest for midwives which threatens that very partnership. Significant conflict will exist for midwives as they struggle to maintain self-worth and professional integrity in a partnership which they recognise cannot continue whether or not their 'partner' (the woman) shares this view. This paper seeks to articulate suggested values and strategies to guide a midwife who decides to be pre-emptive (avoiding the risk of more serious deterioration) and end the partnership relationship.

## BACKGROUND

While the midwife-woman relationship has been identified as the key sustaining element of one-on-one midwifery care (Sandall, 1997; Engel, 2000 & 2003; Cassie, 2004; Wakelin & Skinner, 2007; Hunter et al, 2008; McHugh, 2009; Doherty, 2010; Leap et al., 2011) practice experience reveals the potential for this key relationship to break down (Smythe, 1998). The New Zealand College of Midwives (NZCOM) describes the nature of this partnership relationship as being based on trust, mutual sharing of knowledge, informed decision making and reciprocity (Gulliland & Pairman, 2010). There is a taken for granted assumption that trust can be established and maintained, that there is a willingness for sharing on both sides and a reciprocal respect.

Pelvin (2010) states "the midwife takes a leadership role in establishing the partnership, sustaining it throughout the life of the partnership and negotiating its completion" (p. 305). LMC midwives provide care to a wide range of women and require significant skills to modify and adapt the principles of partnership so that it becomes an individually negotiated and workable relationship. Of paramount importance to a healthy functional partnership is mutual trust, respect and reciprocity (Guilliland & Pairman, 2010; Anderson & Pelvin, 2010). However skilful a midwife may be in working in partnership, when trust is eroded, the health of the relationship is threatened, and can become unsustainable and therefore unsafe.

## THE NATURE OF TRUST

Trust is difficult to define and is described as an 'invisible assumption' most of the time (Simpson, 2012, p. 550). Trust plays a central part in our lives, forming the basis of all relationships (Pask, 1995), but as a concept is 'difficult to pin down' (Honey, 2004, p.11). Baier (1994) suggests that to trust another is dependent on goodwill from that person, but this is clearly subjective. The 'trustee and truster' may have different ideas on what goodwill is.

Goodwill is generated by behaviours that foster a feeling of trust. It is equally true that there are behaviours that contribute to distrust. This may be as a result of misread assumptions (based on past experiences), that relate to expectations about the 'standard and sphere of trust' (Henaghan, 2012, p. 16). Henaghan (2012) goes on to suggest trust will always entail risk as a result of the discretionary elements that exist and that ongoing clarification regarding expectations is required to nurture the trust relationship.

The development of trust in any relationship, including the midwifery partnership, entails reciprocal respect, goodwill, feelings of safety and reliance (Baier, 1994). The trust relationship becomes unstable when behaviours and attitudes do not warrant or provide evidence for the trust (Purtilo & Haddad, 2007). Although the midwifery partnership is based on reciprocity, it is the midwife who has the responsibility to facilitate the development of mutual trust as the relationship establishes, by demonstrating evidence of, or role modelling, her own trustworthiness. Even with particular attention to this, if reciprocal behaviours of trust from the woman are ambivalent or absent, breakdown of the trust will occur for the midwife, and the relationship will become based on fear, with potential for negative outcomes (Secundy & Jackson, 2000; Henagan, 2012).

When a woman chooses a midwife to be her LMC, a registration form is signed by both parties. This essentially becomes a 'contract of care'. Bilateral contracts consist of one promise being exchanged for another which could be perceived as a form of guaranteed mutual goodwill, trust, respect and reliance (Baier, 1994). The Maternity Services Notice (section 88) (Ministry of Health (MOH), 2007b) is explicit in identifying what the midwife provides in terms of service specifications, with all provision being based on "partnership, information and choice" (p. 1033).

If a woman distrusts the care she is receiving and the 'contractual promises' are not being delivered on, it is clear in both Section 88 related documents (MOH, 2007a; MOH, 2007b) and consumer information (Maternity Services Consumer Council, 2008; MAMA, nd; MOH, 2011) that the woman can simply break the contract at any time, by changing her LMC. Section 88 makes reference to the LMC not continuing care in two places (MOH, 2007b, p. 1053 & 1060) but unfortunately these statements fail to guide the midwife. They are confusing, and open to more than one interpretation. Anecdotal evidence exists in that some believe the Section 88 contract of care cannot be 'broken' by the midwife. This is simply not the case although there is no explicit reference to under which circumstances the midwife too can break her signed contract with the woman.

## WHEN TRUST BREAKS DOWN

Professional safety is a concept that is 'based on the sound development of the relationship with the woman' (Skinner, 2010, p. 75), with the essential attributes of strength, trust and reciprocity, that will facilitate appropriate safe decision making by both woman and midwife (Guilliland & Pairman, 2010). When a midwife recognises that the partnership is not working and probably will never work; when she lacks trust in the woman, and feels therefore 'professionally unsafe', she may unilaterally decide she must end the contractual relationship.

Relationships based on fear rather than trust become unsafe and unhealthy.

How often this occurs in NZ LMC practice is unknown, although anecdotal evidence suggests most midwives have at least one complex experience of this kind approximately every five years. Such an infrequent rate of this development is supported by Schorn (2007) in her survey of American midwives unilaterally discharging clients when un-resolvable relationship breakdown is experienced. Many reasons were cited as contributory to the midwife's decision to end the relationship but underlying factors of lack of trust and loyalty existed.

Guilliland (2004) tells us "love and fear are the two strongest feelings for both a woman and a midwife" (p. 5) and that a strong, trusting, reciprocal partnership will contribute to balancing these emotions. Partnership cannot be practised and will become morally inappropriate (Baier, 1994) if either party acts through fear of repercussions. When the midwife perceives the trust relationship has broken down, fear of an unjustified complaint from the woman may become overburdening and precipitate defensive practice (Surtees, 2010). Relationships based on fear rather than trust become unsafe and unhealthy. Henaghan (2012) suggests the human spirit becomes sapped when one lives or works in fear for long periods. Ending the relationship must be essential in these circumstances.

## METHOD

Case studies, such as the one presented in this paper, are used to offer 'detailed and intensive analysis of a single case' (Bryman, 2012, p. 66), examining contemporary phenomena especially where interrelated complex issues are involved (Pope & Mayes, 1995).

Descriptive interpretive analysis has then been used to further explore the case study. This method is ideally suited when the researcher wishes to hear the voice of a person/people, analyse the themes and present a thoughtful overview of results (Sandelowski, 2000; Smythe, 2011). The theoretical underpinnings do exactly what the name implies: describe and interpret.

In order to examine the reality of unexpectedly ending the partnership relationship, Liz asked Debbie to describe a practice experience. Debbie has chosen this specific example because she believes it is one particularly important to share with colleagues. Liz listens and, with Debbie, makes sense of the data. The strength of this approach is its straightforwardness. The limitations of this method is that the analysis may not move beyond what Debbie has said, in order to explore deeper meanings. However the intention here is to provide an insightful exploration that culminates in the reader considering suggested practice principles if ever faced with a similar challenge.

## PRACTICE EXPERIENCE

Debbie was interviewed by Liz about one of her own experiences of a breakdown in the trust-relationship and what follows is part of the transcription of the interview:

*A red flag went up for me the first time we met. There was something about her manner that made me think she had the potential to be demanding and possibly unreasonable. That turned out to be the case on an occasion when she did not approve of something I did. The conversation that resulted was extremely unpleasant and I decided that it*

*was 'unsafe' for me to continue in the relationship. I felt really upset by the whole thing as it was the first time in 10 years of practice to have this experience. But partnership and trust became non-existent and I felt she would be 'out to get me' regardless of the standard of care I provided, at some point or another. Even though I tried, it eventually felt too hard to turn the relationship around when I was feeling so battered. And a fear was growing that if I remained in the relationship I felt at risk for having my reputation undermined unfairly. Thus I decided to withdraw from her care, but found there was nothing to guide me.*

In reflecting on this experience it is clear that right from the beginning Debbie felt this relationship was going to be difficult. There was not the easy, open warmth and sense of mutual goodwill that normally comes with the first meeting. Rather there was distance and formality. When the woman made the complaint, Debbie felt it was unjustified. From her long experience in practice she knew other women readily accepted similar instances of such care. This woman did not seem to understand, or offer Debbie reciprocal respect. This encounter of tension revealed that the woman did not trust the midwife, and the midwife no longer trusted the woman.

Debbie initiated a conversation towards clarification of the misunderstanding in the hope of rebuilding trust, but this was to no avail. The woman was still dissatisfied with the manner of care and she exhibited behaviours that did not foster feelings of trust. At this point Debbie recognised that, for her own well-being and protection, she needed to terminate the relationship. Debbie was now faced with how to do this in a professional manner that would minimise the potential risks for both her client and herself.

## GUIDING FRAMEWORKS FOR MIDWIVES

A framework to support NZ midwives, and help them navigate their way through this challenge does not exist. How should the midwife manage the situation in the most professional way for both the woman and herself? How does the midwife release herself from the LMC contract (MOH, 2007a) that the woman has signed with her? Although an 'exit' clause exists for the woman, there is no equivalent for the midwife should she find herself in the uncomfortable, and unsettling situation of wanting to end the contract of care.

When a woman declines a referral, consultation, transfer of clinical responsibility, emergency treatment or emergency transport, the Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines) (Ministry of Health, 2012) directs the LMC midwife how to fulfil her professional responsibilities. Steps are outlined to support the LMC with continuing care in this challenging situation. Additionally steps are provided should the LMC decide to discontinue care. However no specific midwifery guideline exists to support practice in a non-clinical situation that necessitates the unexpected and unilateral end to the midwife-woman relationship.

Midwifery Council New Zealand (MCNZ) "Code of Conduct" booklet (2010) refers only to ending the "professional relationship with women at the appropriate time as communicated with each woman in a professional manner" (p. 3). This refers to the natural ending of the partnership usually four to six weeks into the postnatal period.

Anderson and Pelvin (2010), in their chapter on ethical frameworks in the textbook Midwifery: Preparation for Practice, present a scenario of a difficult midwife-woman partnership. They pose questions for consideration, but provide no answers or guidelines, particularly in the context of a partnership becoming unworkable. Surprisingly midwives may find the most guiding document to be that of NZCOM's "Unexpected Outcome? Legal & professional information for midwives" (nd). The 'unexpected outcome' in this booklet is never identified as such, so could cover a range of possibilities, including the unplanned for, and rare, need to terminate the partnership. Certainly the advice offered regarding the question "I've been involved in a case which may result in a complaint - what should I do?" (p. 2) could apply to the stressful challenge of terminating the midwife-woman relationship as there is a strong likelihood the woman will feel aggrieved with her midwife's decision, and make a complaint. However, amidst the experience of living through the tension of ending the partnership because of reciprocal lack of trust, with or without an 'unexpected outcome", Debbie would have valued clear, specific steps to guide her.

## GUIDING FRAMEWORKS USED BY OTHER PROFESSIONS

Nursing Council of NZ provides guidelines on professional boundaries for nurses (2012), but, like MCNZ's Code of Conduct (2010), the statement on concluding professional relationships is related to a positive and natural end. However Cole's Medical Practice in NZ (St. John, 2011) guides the medical profession in terminating the professional relationship when there is a breakdown. Paterson (2005) discusses this scenario in depth and refers to the relevant statement in the NZ Medical Association's Code of Ethics (2008) that acknowledges the right to withdraw from providing care in certain situations and lays out the steps that are required. Paterson (2005) qualifies this course of action by saying it must be "handled with care" and "calling it quits should be an option of last resort" (np)

The NZ Association of Psychotherapists (NZAP) and NZ Association of Counsellors (NZAC) discuss in their handbooks (NZAP, 2008; NZAC, 2002) the mandatory role of professional supervision, citing the challenging client-practitioner relationship as an issue that will benefit from the insight, support and guidance gained from in-depth discussion with the practitioner's supervisor. Facing this issue, in addition to the support received from practice colleagues, midwives would similarly benefit from the opportunity to take stock and reflect with a skilled midwife 'mentor', as described by Smythe and Young (2008) and Lennox, Skinner and Foureur (2008). Concepts of self-care, staying safe and sustaining practice all spring to mind as key concepts influencing the midwife fielding this challenge.

When we looked further afield in the literature, we found that the National Association of Certified Professional Midwives (2004) and the American College of Nurse Midwives (2008) grant their members the right to discontinue care in 'unacceptable situations' resulting in lack of trust and partnership (Foster and Lasser, 2011). They discuss the ethics involved in this very serious matter. Inherent risks to the woman, such as abandonment, must be thoroughly considered (Paterson, 2005; Schorn, 2007; Foster & Lasser, 2011). Foster and Lasser (2011) acknowledge the importance of seeking collegial support, but also suggest establishing and following written guidelines "as these situations can be very difficult to manage ethically" and stress the aim that "dignity, autonomy and fidelity" are upheld for all involved (p. 141).

Midwives will experience conflict when they recognise a particular relationship cannot continue.

Midwives will experience conflict when they recognise a particular relationship cannot continue. Maintaining self-worth and professional integrity when faced with such a key concept as partnership not working, may produce a 'burden of moral stress' (Dann, 2007, p. 639). Surtees (2010) expresses this as "balancing the elements of risk within the realms of restraint and responsibility of partnership with women" (p. 81). A formal framework that facilitates a professional and safe way to unexpectedly end

the midwife-woman relationship (albeit an infrequent occurrence) would be supportive to midwives in NZ and contribute to sustaining practice.

## GOING THROUGH THE EXPERIENCE

Debbie recalled what it was like to go through such an experience:

> *I felt I was 'damned if I did' and 'damned if I didn't' get myself out of the partnership. I knew whatever I did, I was going to remain vulnerable. I didn't want to work with someone whom I felt would inevitably make a complaint about me, regardless of the care I provided. I found it really upsetting and would go so far as saying I found myself in a state of anxiety. I wouldn't want to have face too many of these situations especially as I consider myself to normally work very well in partnership! Thank goodness for my close midwifery colleagues. Together we nutted out how we thought it best to handle the situation....*

Withdrawing from a client relationship generates stress and anxiety and should not be tackled alone. Often the midwife is already dealing with an angry client. Ending the relationship professionally and safely is demanding and however 'well done', there is potential for repercussions.

At the very heart of coping with a challenge, such as this, must lie the availability of meaningful midwifery support (midwifery practice colleagues, mentors, and advisors) in order for the midwife to reflect constructively on the experience that has presented. The way forward for Debbie required thoughtful collaborative planning, of appropriate care and safety for both parties, whilst still enabling her to "maintain a secure sense of self" (Pairman, 2006, p. 93), as well as sustaining her practice and passion for midwifery.

## WORKING OUT OWN FRAMEWORK

Debbie described to Liz the strategies she developed for herself after unsuccessful attempts were made to rebuild the trust in the partnership. Liz unpacked the data Debbie provided.

*Support from colleagues*

> *I was disappointed that the situation wasn't able to be reconciled but felt relieved I had my close practice partners to carry on getting support from. They helped me establish 'where to next' with the difficult job of extricating myself from being the LMC.*

It is important to have close relationships with colleagues who already know and trust one's normal standard of practice. Their feedback is an important touchstone of the seriousness of the situation.

*Support from others*

> *I was so upset by the whole thing. It felt hideous. I worried about it so much I felt I needed to talk to key people outside of my practice as well, people I trusted in and out of the profession, just to check out other perspectives... like the consumer one I guess. I had great support around getting out of the partnership which was reassuring.*

To remove oneself from providing care to a woman is a big step. It is possible that the midwife herself is too close to see influencing factors that could be resolved. For Debbie, one important voice was that of 'the consumer'; a trusted woman who gave a perspective from having stood on the other side of the partnership relationship.

*Communicating with the woman*

> *Talking on the phone had become very difficult, impossible actually, as what I was saying wasn't heard or accepted...responses were really aggressive. In the end I wrote a letter clearly stating I was not her LMC anymore.*

Ineffective communication was the root of the problem in this situation. Therefore it was important that the midwife record her decision to withdraw care in writing. Debbie needed to know the outcome was clearly stated and heard, and that she herself had evidence of the wording of the message.

*Communication with others*

> *I actually felt I needed to make this action as formal as possible by informing the District Health Board DHB, (and Health Benefits) that I was not now the LMC. I didn't want the DHB to be phoning me in the middle of the night saying my woman had presented and I needed to come in. Section 88 provides no guidance/steps that should be taken to undo the LMC'ship. I had to make it up as I went along.*

Ending the relationship professionally and safely is demanding and however 'well done', there is potential for repercussions.

Debbie was not sure whom she needed to inform, so she made sure every stakeholder who could end up in the midst of this situation knew she was no longer the LMC. It was important for the woman's safety that there was no confusion in her ongoing care about who was carrying clinical responsibility.

*Preventing a gap in care*

> *One of the things I was advised about was to send a list of alternative midwives/providers in order to minimise the sense of abandonment. I also got in touch with the manager of the DHB Community Team and told her the situation as I suspected this would probably be where care would be taken up. Not only did I get great support from this midwifery manager but I felt as if I was also doing a handover.*

It was difficult for Debbie to hand over care when she did not know who the woman would turn to for ongoing care. Nevertheless, Debbie's understanding of options helped her to recognise the most likely choice. She talks of feeling very supported in this difficult situation. Such support makes all the difference for both parties in the breakdown of a relationship.

*Documentation*

> *What I did was to make sure that I documented all our conversations very carefully. I had to do this on separate pieces of paper as the maternity notes were with the woman. I then wrote a letter to the woman. That meant that we both should have been very clear about where each of us stood.*

As an LMC Debbie already knew the importance of documentation. The difference in this situation was that she no longer held the woman's notes. However she recognised the need to establish her own file of all written communication, and to write an audit trail of events.

## EMERGING PRINCIPLES

Principles emerge from our reflections on what Debbie intuitively did. These are about:

*Meaningful midwifery relationships*

Skinner (2008 and 2010) states that the development and maintenance of meaningful successful midwifery relationships are crucial in practice. Others agree that "the quality of relationships is fundamental to the quality of maternity care" (Hunter et al., 2008, p.132). Midwives require supportive reciprocal relationships (Kirkham, 2007; Pelvin, 2010) to underpin their practice so they can remain safe. Hunter et al. (2008) state provision of continuity of care is "conducive to relationship formation" (p.134) and this should equally apply to supportive midwifery relationships within midwifery practices.

Building links, cherishing and trusting each other, using the same principles of the midwifery partnership (Guilliland & Pairman, 2010), will not only

sustain midwives within a practice on an everyday basis, but will prove invaluable when challenges and dilemmas present. Although Smythe (1998) is essentially referring to the midwife-woman partnership, the trust and knowing generated in trusted midwifery relationships can free the midwife to "leap ahead, discerning what she perceives lies in the darkness" (p. 188).

Midwives supporting midwives will create a positive spiral/continuum (Kirkham, 2007). The value of time used to facilitate investment in developing such relationships cannot be underestimated. Jones (2000) suggests that midwives positively supporting midwives will generate generosity of spirit, reciprocity, and "as long as the circle of empowerment remains unbroken, it is self-perpetuating" (p. 167).

*Generation of wider collegial support*

If a midwife develops a trusting relationship with a 'wise woman' midwife mentor outside her practice, this will provide opportunity for her to gain perspective, advice and guidance, to reflect and feel empowered - all of which are required, but more at some times than others. Mentoring support is available through the Midwifery First Year of Practice Programme (New Zealand College of Midwives website) for graduate midwives but this should not be seen as only applicable to new graduates but to all midwives. Smythe and Young (2008) describe a more formal arrangement introducing the notion of paid professional supervision which would offer a "safe place.... to ponder" (p. 13). In addition professional advice and support, particularly when a dilemma presents, can be accessed from an NZCOM Midwifery Advisor.

*Remaining professional*

Frameworks for practice provided by MCNZ (e.g. Code of Conduct, 2010), NZCOM (e.g. Code of Ethics, Standards for Practice, 2008) and MOH (e.g. Section 88 including Referral Guidelines, 2007 & 2011) guide practice in most complex situations (Skinner, 2010). Facilitation of collegial support and collaboration and the delineation of professional practice boundaries are outlined in these documents and careful reading of them will support the midwife to remain professional and provide appropriate care in most situations where a midwifery dilemma presents.

However, within these frameworks, there are no specific guidelines that lay out an appropriate, safe and professional process to end the unexpected and premature conclusion to the partnership.

*Communication*

Hunter et al. (2008) suggest "the quality of relationships is inevitably linked to the quality of communication, and effective communication is essential for safe practice" (p.133). This applies primarily to the midwife-woman relationship but, equally, talking through practice challenges in depth with valued practice colleagues will help to clarify how to appropriately manage a complex situation, coincidentally keeping the midwife safe (Brodie et al., 2008; Foster & Lasser, 2011; Davies, Price, Edwards, & Beech, 2013).

Communication is considered by Foster and Lasser (2011) to "be the midwife's most important tool' (p. 140), and the quality of communication reflects the quality of the midwife-woman relationship (Skinner, 2010). In irremediable situations effective verbal communication becomes difficult, if not impossible. Regardless, a decision to withdraw from the contract of care, and the reasons for this, must somehow be articulated to the woman (Paterson, 2005).

*Keeping the midwife safe*

Comprehensive and accurate documentation of the sequence of events ideally provide evidence of attempts to renegotiate the partnership, decision to terminate care, steps taken to avoid abandonment or gap in care, and where possible handover to next maternity provider (Foster & Lasser, 2011). By so documenting, the midwife is properly following her profession's code of ethics and standards of practice (NZCOM, 2008) and thereby maintaining her own safety in this context (Skinner, 2010).

*Keeping the woman safe*

A midwife who decides to end the contract of care will be faced with her own sense of failure in terms of partnership, obligation and duty. This sentiment must not prevent her from acknowledging the woman's potential experience of loss and abandonment (Forster & Lasser, 2011). Abandonment will be minimised by taking all actions to provide the woman with alternative care options - which admittedly will be harder in some geographical areas than others.

Although there are no legal issues regarding termination of the woman-midwife relationship, there are ethical considerations that include concepts of dignity, autonomy, fidelity, beneficence and non-malificence. Foster and Lasser (2011) argue that, if the woman is denied clear communication, documentation, information on alternative maternity providers, and handover (if possible), then the gap in care and sense of abandonment that ensue will reflect badly, not only on the individual midwife but also on the profession as a whole. To minimise this happening they suggest that the 'establishment of written guidelines for discharging clients....is advisable" (p. 141).

## DEVELOPMENT OF SUPPORT FOR PRACTICE

From the principles that emerged during Debbie's discussion with Liz, an interim framework is offered to guide midwifery practice in similar situations (Table 1). It is hoped that this paper will stimulate further discussion from the wider midwifery community, particularly amongst those who have found themselves facing this experience. Should that occur, the potential for future development of a national consensus on formal guidelines, to replace this interim framework, is high.

***Table 1:*** Framework for attempting to rebuild trust within the partnership:

- Maintain woman's dignity throughout
- Generate support from midwifery colleagues
- Reflect on situation with an experienced midwife to clarify circumstances and plan appropriate ways to rebuild partnership
- Discuss the issue directly with the woman. Clearly explain why the partnership is not working for you as the midwife. Attempt to negotiate to maintain the partnership
- Document the discussion in the woman's maternity notes
- Offer, if necessary, a mediated meeting, either through agency of paid professional mediator or through agency of NZCOM Resolutions Committee
- Seek professional support and advice from a midwifery 'mentor'
- Write own personal documentation/reflection on the situation

If no resolution:

- Communicate clearly to the woman that the partnership has ended
- Minimize risk to woman; avoid sense of "abandonment" and a gap in care if possible by providing a list of alternative care providers
- Document each step
- Photocopy all notes
- Provide a "handover" to next LMC

*"Extensive feedback" may be received, via the Midwives Standards Review process (NZCOM), from the woman. If accepted by the woman this, too, may lead to a Resolutions Committee meeting. A formal complaint may still occur.*

## CONCLUSION

New Zealand's unique LMC midwifery model of practice, as translated through our LMC system of delivery of maternity care, is a privilege for both women and midwives. Underpinning this model of practice is the concept of partnership. Even when truly upholding this concept, midwives may occasionally find themselves faced with the challenge of a partnership that has irretrievably broken down. As Debbie's experience revealed, navigating the stressful situation of ending the midwife-woman relationship alone, felt unsustainable. Whilst trusted and meaningful support from practice colleagues and the wider midwifery community is essential for safe practice and the wellbeing of the midwife - and usually readily available to most midwives, there is a lack of 'support' in the shape of a 'brass tacks' formal guideline that maps a process reflecting a professional and responsible approach.

An interim framework based on practice principles has been presented for the midwife to consider if confronted with this situation. This offers

an interim navigational tool and intends to provoke a conversation and a process leading to formal guidelines for an appropriate, safe and professional (if not albeit unexpected and premature) conclusion to the partnership. National guidelines are essential for the midwife to maintain self-worth and integrity, and to be able to stand strong and true to her profession throughout this fraught but rare challenge.

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NEW ZEALAND RESEARCH

# Smoking prevalence trends: An analysis of smoking at pregnancy registration and at discharge from a midwife Lead Maternity Carer, 2008 to 2010


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## ABSTRACT

**Background:** Smoking during pregnancy has a detrimental effect on both maternal and neonatal health. The government has agreed a long term goal for New Zealand (NZ) to become a smoke-free nation by 2025, with smoking cessation during pregnancy a government priority. Contemporary information, reviewing the prevalence and demographics of women who smoke during pregnancy, is important so that change can be monitored and cessation support appropriately targeted. **Aim:** To examine the prevalence of smoking for 81,821 pregnant women who registered with a midwife Lead Maternity Carer (LMC) between the years 2008 to 2010. **Methods:** A retrospective observational design using aggregated clinical data from the New Zealand College of Midwives clinical outcomes research database (COMCORD) for the years 2008 to 2010. Women's self- reported smoking or smoke-free status was recorded at registration with, and at discharge from, a midwife LMC. **Findings:** A trend of reduced smoking prevalence at registration was found for this cohort (reduced from 19.5% in 2008 to 18.4% in 2010). Women who identified as Māori had the highest rates of smoking (42.9%) followed by Pasifika (15%) and NZ European ethnicity (13.4%). Women in the 16 to 19 years age group had the highest rate of smoking (39.4%) followed by the under 16 years age group (35.7%). Increasing parity was also associated with an increased likelihood of smoking at registration. By discharge from midwifery care there were reduced rates of smoking across all groups.

**Conclusion:** Overall smoking during pregnancy prevalence rates are trending down with reduced rates of smoking across all groups by discharge from a midwife. Cessation messages and support need to be targeted to young women (under 25years), multiparous women and women of Māori ethnicity.



## KEY WORDS

Smoking, pregnancy registration & discharge, midwife


## INTRODUCTION

Smoking during pregnancy affects both maternal and neonatal health and remains the most significant preventable cause of fetal and infant death and disease (ASH, 2009). When a woman smokes during pregnancy she is at increased risk for pregnancy complications and neonatal/infant mortality and morbidity. Smoking cessation prior to or during pregnancy can dramatically improve health outcomes for the woman, her infant and family (McCowan et al., 2009). Support for smoking cessation during pregnancy has the potential to impact not just maternal health but also neonatal and family health. If sustained it may also have a wider impact on the health and smoking prevalence within New Zealand society.

In 2011 the government agreed a long term goal of making New Zealand essentially a smoke-free nation by 2025 with a short term goal to halve tobacco consumption by 2015 (Dowswell et al., 2011). Smoking cessation during pregnancy has been set as a health target with all health professionals required to **A** (ask about smoking status), **B** (provide brief advice) and **C** (refer to cessation services) every person accessing health services. The rationale underlying this strategy is that the more frequently a person is asked whether or not they smoke and, if they do, then informed (again) of the harmful effects of smoking by a health professional, the more likely they are to stop smoking. There are a variety of other strategies, such as pictorial health warnings on cigarette packets and smoke-free community environments, which altogether are expected to have an effect on smoking prevalence. Recording the number of women who smoke during pregnancy on a regular basis is important and can provide a benchmark against which changes can be monitored and evaluated.

In 2009 the New Zealand College of Midwives (NZCOM) published research reporting the rates of smoking during pregnancy for a cohort of New Zealand women for the years 2004 to 2007 (New Zealand College of Midwives, 2009). Smoking status was documented by the Lead Maternity Carer (LMC) midwife at pregnancy registration and again at postnatal discharge. The prevalence of smoking at pregnancy registration was 19.2% in 2007 dropping to 15% at discharge from midwifery care during the post-partum period. Women under the age of 25 years and women who identified as Māori had the highest rate of smoking at pregnancy registration and the highest rates of reduction by the postpartum period.

The primary aim of this study was to describe and analyse the prevalence of smoking during pregnancy among a cohort of pregnant women for the years 2008 to 2010. The data are from information provided by midwives who work as Lead Maternity Carers and are members of the Midwifery and Maternity Provider Organisation (MMPO). The secondary aim was to identify and describe trends, by utilising the same methodology and research database as the previous study of smoking during pregnancy (NZCOM, 2009).

## METHOD

This retrospective cohort study used longitudinal, prospectively collected data to describe and analyse information about smoking and smoke-free behaviour of women at pregnancy registration and then at postnatal discharge, who were registered with an MMPO member midwife LMC across the years 2008 to 2010. Sub group analysis determined the association between age group, ethnicity, parity and reported smoking/smoke-free status. Descriptive statistical data techniques using SPSS 17 were used to analyse the data. Ethical approval was obtained from the New Zealand Health and Disability Ethics Committee using the expedited ethics process URA/11/EXP/041.

## DATA SOURCE

The Midwifery and Maternity Provider Organisation is a national practice management system which all members of the College of Midwives, who practise as LMCs, are eligible to join, with numbers increasing annually. Information from the clinical maternity health record for each woman is summarised by the LMC midwife and sent to the MMPO. This information is then entered into the IT system by dedicated data entry staff. Midwives themselves can also directly enter information via a remote link if they wish. The summary data are provided to Sector Services (Ministry of Health) to support midwifery claims for services. They are also used to provide individual midwives with personalised outcome reports which inform their biennial Midwifery Standards Review, a component of which is reflection on outcomes related to practice.

The summary data are aggregated and anonymised to provide the College of Midwives Clinical Outcomes Research Database (COMCORD). The database has several inbuilt features designed to enhance the reliability of the data. An annual national midwifery outcome report is published yearly using the database. Data are used by researchers and the midwifery profession to investigate specific issues within maternity care in New Zealand.

Smoking behaviour is a mandatory field in the clinical notes with data collection being required when the midwife registers as the woman's LMC and at postnatal discharge. Women are asked if they smoke, and results are documented as either 'does not smoke' or the number of cigarettes smoked daily. This question is repeated at postnatal discharge from midwifery care which occurs between 4 and 6 weeks following the birth.

## SAMPLE

For the years 2008 to 2010 information was available for a total of 81,821 women within the NZCOM research database. This included data from:

- 01 Jan 2008 to 31 Dec 2008 – 25,149 women
- 01 Jan 2009 to 31 Dec 2009 – 26,767 women
- 01 Jan 2010 to 31 Dec 2010 – 29,905 women

All women who had registration, birth and postnatal discharge data were included in the study. The study cohort provided data on between 38% and 46.5% of the whole maternity population between 2008 and 2010.

## FINDINGS

The demographic information for the total cohort is presented in Table 1 along with smoking status.

### *Table 1:* Cohort demographics of ethnicity, age and parity by smoking status 2008 to 2010 years combined

| *Demographics at time of registration* | *Smoking status by ethnic group* | | | |
|---|---|---|---|---|
| | Not smoking | | Reported smoking | |
| *Ethnicity* | n | % | n | % |
| NZ European | 45797 | 86.6 | 7070 | 13.4 |
| Māori | 9869 | 57.1 | 7426 | 42.9 |
| Pacific Island | 3690 | 85.0 | 653 | 15.0 |
| Asian | 4489 | 99.0 | 46 | 1.0 |
| Other | 2502 | 95.9 | 106 | 4.1 |
| Not stated | 147 | 85.0 | 26 | 15.0 |
| **Total** | **66494** | **81.3** | **15327** | **18.7** |
| *Age* | Not smoking | | Reported smoking | |
| | n | % | n | % |
| < 16 | 240 | 64.3 | 133 | 35.7 |
| 16-19 | 4494 | 60.6 | 2916 | 39.4 |
| 20-24 | 11378 | 69.9 | 4890 | 30.1 |
| 25-29 | 17826 | 83.3 | 3571 | 16.7 |
| 30-34 | 19770 | 89.4 | 2355 | 10.6 |
| 35-39 | 10902 | 90.1 | 1196 | 9.9 |
| 40+ | 1884 | 87.6 | 266 | 12.4 |
| **Total** | **66494** | **81.3** | **15327** | **18.7** |
| *Parity* | Not smoking | | Reported smoking | |
| | n | % | n | % |
| Nulliparous | 28321 | 83.7 | 5518 | 16.3 |
| Multiparous | 38173 | 79.6 | 9809 | 20.4 |
| **Total** | **66494** | **81.3** | **15327** | **18.7** |

A comparison between the 2010 COMCORD cohort and the Ministry of Health report on Maternity for 2010 was made (Ministry of Health, 2012). This was to determine whether the cohort was representative of the maternity population and could therefore be generalised to the whole of the maternity population (Table 2).

### *Table 2:* Comparison of cohort to National Minimum dataset for 2010

| | 2010 | |
|---|---|---|
| Age | MOH 2010 National Minimum dataset | Study cohort |
| <19 | 7.1 | 9.2 |
| 20-24 | 18.6 | 20.3 |
| 25-29 | 24.9 | 26.4 |
| 30-34 | 27.6 | 26.9 |
| 35 + | 21.7 | 17.2 |
| Ethnicity | | |
| Māori | 25.4 | 21.1 |
| Pasifika | 11.7 | 6.2 |
| NZ European | 50.1 | 62.6 |
| Asian | 10.8 | 6.3 |

The study cohort had a median age of 28 years in 2010 compared to a median of 29 years for the national dataset (Ministry of Health, 2012). The ethnicity data demonstrated that Māori, Pasifika and Asian ethnicities were under represented in the study cohort when compared to the 2010 national MOH dataset, thus reducing the generalizability of the results to these groups.

Over the three years 2008 to 2010 the percentage of women who were smoke free increased from 80.5% in 2008 to 81.6% in 2010 (Table 3).

### *Table 3:* Smoking status at registration and at discharge for the years 2008 to 2010

| **Antenatal registration smoking status** | **2008** | | **2009** | | **2010** | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| Not smoking | 20248 | 80.5 | 21837 | 81.6 | 24409 | 81.6 |
| Reported Smoking | 4901 | 19.5 | 4930 | 18.4 | 5496 | 18.4 |
| Not stated | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Total | 25149 | 100 | 26767 | 100 | 29905 | 100 |
| **Postnatal discharge smoking status** | **2008** | | **2009** | | **2010** | |
| | N | % | N | % | N | % |
| Not smoking | 20523 | 81.6 | 21734 | 81.2 | 24891 | 83.2 |
| Reported Smoking | 3818 | 15.2 | 3635 | 13.6 | 4118 | 13.8 |
| Not stated | 808 | 3.2 | 1398 | 5.2 | 896 | 3.0 |
| Total | 25149 | 100 | 26767 | 100 | 29905 | 100 |

Of the 15,327 women who reported smoking at registration, 11,571 reported that they were smoking at postnatal discharge - a reduction of 24.5% (n=3756) across the total cohort between registration and discharge. Smoking status was missing for less than 4% of the cohort at completion of midwifery care following the birth. Reasons for this data loss were varied but the lack of data was considered to have a minimal influence on overall results because the proportion of data loss was similar for both smoking and non-smoking groups.

The proportions of women who reported smoking at registration and at postnatal discharge for each year were examined using McNemar's test to determine the significance of any difference between the correlated proportions (Table 4).

### *Table 4:* Mean reduction in proportion of smokers between antenatal and postnatal visit ('not stated' was excluded from analysis)

| Year | % Smoking | | % Difference (95% CI) | McNemar $\chi^2$ | P | Odds Ratio (95% CI) |
|---|---|---|---|---|---|---|
| | Antenatal registration | Postnatal discharge | | | | |
| 2008 | 19.3 | 15.7 | 3.6 | 338.8 | <0.0001 | 2.2 (2.1, 2.4) |
| 2009 | 18.4 | 14.3 | 4.1 | 445.6 | <0.0001 | 2.5 (2.3, 2.8) |
| 2010 | 18.3 | 14.2 | 4.1 | 529.8 | <0.0001 | 2.3 (2.0, 2.4) |
| All years | 18.6 | 14.7 | 3.9 | 3100.5 | <0.0001 | 2.5 (2.3, 2.6) |

There was a reduction in smoking at the postnatal discharge across all the years (2008 to 2010). For the three years combined there was a 3.9% reduction in smoking between the antenatal registration and postnatal discharge. For each individual year the percentage reduction in the number of women who reported smoking antenatally and not postnatally varied between 3.6% (OR 2.2 CI 95% 2.1 – 2.4) in 2008 to 4.1% (OR 2.3 CI 95% 2.0, 2.4) in 2010. This reduction in smoking status was statistically significant (P<0.0001) and the odds ratios indicate an increase in the odds of women not smoking at discharge.

## Trends in smoking during pregnancy from 2004 to 2010

When the results from this 2008-2010 study are pooled with those of the previous research study (2004 to 2007) the trends for smoking during pregnancy can be determined over a seven year period (New Zealand College of Midwives, 2009). The data from the seven year period indicate a trend reduction in the percentage of women reporting smoking at pregnancy registration from 22.9% in 2004 to 18.4% in 2010, a reduction of 4.5% over the seven years (Figure 1). A comparison has been made to the Ministry of Health *Tobacco Use in New Zealand* survey (2010) and *Tobacco Trends 2008* (2009) which provide a general overview of the smoking prevalence for the population overall (age 15 – 64) in New Zealand. This comparison is useful in that it demonstrates the slow but steady decrease in smoking within the general population that has occurred over time and a similar steady reduction in the percentage of women smoking at pregnancy registration in the MMPO cohort from 2004 to 2010.

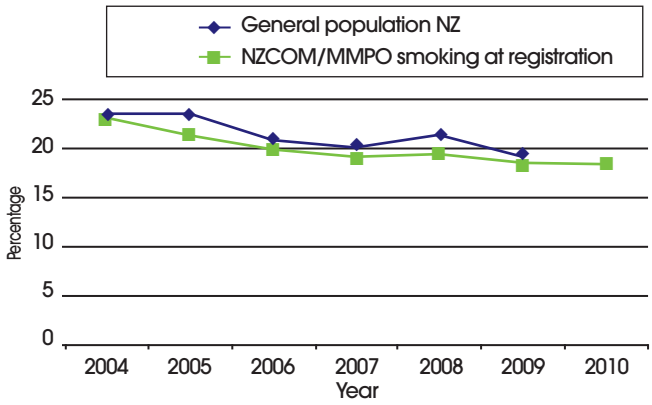


***Figure 1***: Smoking during pregnancy from 2004 to 2010 (NZCOMCORD) compared to the smoking tend within the general population

## Ethnicity and smoking

At registration, women self-identified their ethnicity from up to 16 different ethnicity options, with the woman able to choose up to three ethnic groups, each of which was recorded by the midwife. These groups were then prioritised as per the Health and Disability Sector ethnicity data protocols (Ministry of Health, 2004). The ethnicity and smoking status for each year were examined to determine whether ethnicity was a significant factor in smoking or non-smoking behaviour (Table 5).

Women who identified as Māori had the highest rates of smoking with 42.9% of the total Māori cohort self-reporting smoking at registration. Women who identified as Pasifika had the second highest rate of smoking at 15% followed by NZ European women at 13.4%. Those women who identified as Asian ethnicity had the lowest rate of smoking (1%). There was a statistically significant association between smoking and ethnicity ($\chi 2=8998$, df=5, $p < 0.0001$) in that significantly more women, who identified as Māori, reported smoking. This was consistent across each individual year and all years combined and true for both antenatal and postnatal smoking.

**Table 5:** Ethnicity and smoking at registration and discharge 2008 to 2010

| Year | 2008 | | | | 2009 | | | | 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pregnancy registration | | Postnatal discharge | | Pregnancy registration | | Postnatal discharge | | Pregnancy registration | | Postnatal discharge | |
| Ethnicity | n | % | n | % | n | % | n | % | n | % | n | % |
| **NZ European** | 2312 | **13.9** | 1835 | **11.4** | 2309 | **13.2** | 1718 | **10.3** | 2449 | **13.1** | 1830 | **10.0** |
| **Māori** | 2325 | **43.6** | 1801 | **35.4** | 2403 | **42.4** | 1777 | **33.5** | 2698 | **42.8** | 2068 | **34.2** |
| **Pacific** | 204 | **17.1** | 129 | **11.1** | 171 | **13.1** | 106 | **8.7** | 278 | **15.1** | 170 | **9.6** |
| **Asian** | 16 | **1.3** | 16 | **1.4** | 8 | **0.6** | 7 | **0.5** | 22 | **1.2** | 14 | **0.8** |
| **Other** | 32 | **4.2** | 26 | **3.6** | 37 | **4.7** | 24 | **3.2** | 37 | **3.5** | 26 | **2.5** |
| **Not Stated** | 12 | **19.7** | 11 | **19** | 2 | **4.8** | 3 | **7.9** | 12 | **17.1** | 10 | **14.7** |

From registration to discharge there was a reduction in smoking prevalence across all groups. The greatest reduction occurred for women who identified as Māori with a reduction of between 8.2% and 8.9% for each of the three years (from 43.6% down to 35.4% in 2008) and women who identified as Pasifika (between 4.6% and 6%) (Table 5).

## Smoking and age

To establish whether age was an important determinant of smoking, the age and smoking status for each of the years were examined. Age was categorised as: less than16 years, 16-19 years, 20-24 years, 25-29 years, 30-34 years, 35-39 years and more than 40 years.

Those most likely to report smoking at pregnancy registration were women who were 25 years of age or younger (Table 6). The highest prevalence of smoking was amongst the 16-19 years group with a prevalence of 39.4% across the three years (Table 1). An independent t-test indicated that pregnant women who smoked were on average 3.6 years younger than non-smokers ($p < 0.0001$). The mean age for a woman who smoked was 25.3 years compared to 28.8 years for a woman who didn't smoke.

Pregnant women under 16 years of age comprised the highest proportion of smoking at pregnancy registration (35.7%) overall, but over the three years there was a greater reduction (8.8%) of smoking within this group, from 39.1% in 2008 to 30.3% in 2010 (Table 6).

Less than 4 percent (3102/81821) of the cohort had smoking status missing at postnatal discharge, but this was not statistically significant. Smoking status at discharge demonstrated reductions in smoking across all age groups, with the age group showing the largest decrease in smoking between antenatal registration to postnatal discharge being women between 16 and 19 years of age (10.1%). This was followed by the under 16 age group (reduction of 8.4%) and women between 20 and 24 years of age group (7.1%).

## Smoking and parity at registration and discharge

The correlation between parity and smoking behaviour was explored with smoking and parity examined as a discrete cohort. During registration with a midwife the woman's obstetric history is taken, which includes the number of previous births, if any (Table 7). The results indicate that as parity increased the likelihood of smoking at registration also increased. It would appear that there is a link between smoking and parity. This association was statistically significant for both antenatal smoking ($\chi^2$trend=1422, df=1, $p < 0.0001$) and postnatal smoking ($\chi^2$trend =1287, df=1, $p < 0.0001$) such that the greater the parity the greater the likelihood of smoking.

**Table 7:** Parity and smoking 2008–2010 combined

| | Smoking at registration | | Smoking at discharge | |
|---|---|---|---|---|
| Parity | n | % | n | % |
| 0 | 5518 | 16.3 | 3978 | 12.2 |
| 1 | 4300 | 16.0 | 3325 | 12.8 |
| 2 | 2594 | 20.7 | 2001 | 16.6 |
| 3 | 1431 | 29.9 | 1106 | 24.0 |
| 4 | 729 | 37.6 | 570 | 30.6 |
| 5+ | 755 | 42.4 | 591 | 34.9 |

Across all groups there were fewer women smoking at postnatal discharge. The group with the greatest reduction were women who were para 4 plus (7% fall in smoking by discharge) although there was a reduction in smoking (of approximately 4%) across all parities.

**Table 6:** Age and smoking at registration and discharge 2008 to 2010

| Year | 2008 | | | | 2009 | | | | 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pregnancy registration | | Postnatal discharge | | Pregnancy registration | | Postnatal discharge | | Pregnancy registration | | Postnatal discharge | |
| Age group | n | % | n | % | n | % | n | % | n | % | n | % |
| **<16** | 45 | **39.1** | 38 | **33.0** | 48 | **38.1** | 35 | **27.8** | 40 | **30.3** | 29 | **22.0** |
| **16–19** | 961 | **40.4** | 718 | **30.2** | 925 | **38.5** | 674 | **28.1** | 1030 | **39.1** | 778 | **29.6** |
| **20–24** | 1453 | **29.6** | 1155 | **23.5** | 1623 | **30.7** | 1222 | **23.0** | 1814 | **29.9** | 1360 | **22.4** |
| **25–29** | 1199 | **18.4** | 942 | **14.5** | 1112 | **15.9** | 832 | **11.9** | 1260 | **16.0** | 935 | **11.9** |
| **30–34** | 777 | **11.3** | 594 | **8.6** | 738 | **10.2** | 505 | **7.0** | 840 | **10.4** | 621 | **7.7** |
| **35–39** | 392 | **10.5** | 309 | **8.3** | 403 | **9.9** | 302 | **7.4** | 401 | **9.3** | 302 | **7.0** |
| **40+** | 74 | **12.3** | 62 | **10.3** | 81 | **11.9** | 65 | **9.5** | 111 | **12.8** | 93 | **10.7** |

### Predicting likelihood of smoking during pregnancy

Demographic variables thought to be predictive of antenatal smoking were entered into a logistic regression. The odds of a woman smoking at registration were 2.6 times (95% CI: 2.5 to 2.7) higher for a woman who identified as Māori when compared to a New Zealand European woman. The odds of smoking increased with parity. Whereas a woman with a parity of one was 1.4 (95% CI: 1.3 to 1.5) times more likely to smoke than a primiparous women, a woman who had four children was 5.8 (95% CI: 5.2 to 6.5) times more likely to smoke than a nulliparous woman. Similarly for each additional year of age at registration the odds of smoking antenatally decreased by 0.888. (OR 0.884 to 0.891).

## DISCUSSION

The purpose of this research was to provide information about smoking during pregnancy for a cohort of pregnant women in the New Zealand context of maternity care. Smoking cessation during pregnancy is a key health target. Having recent and reliable information about the prevalence of smoking during pregnancy for a sizeable proportion of NZ pregnant women and the key groups within that sample of women who smoke, can provide a benchmark on which to measure how close New Zealand as a whole is to the 2025 smoke-free goal.

Ethnicity, age and parity all appear to have an influence and are predictive of smoking at pregnancy registration. Findings also indicate a change to smoke-free status which has occurred at some point between pregnancy registration and postnatal discharge for some in these groups. All of the women in this study had a midwife providing lead maternity care during pregnancy and into the postpartum period. Midwives are educated to provide information, support and referral to cessation services when a woman reports smoking during pregnancy.

### *Trends*

This study found that between 2004 and 2010 smoking prevalence during pregnancy was trending down and comparison with national data reveals a similar trend (Ministry of Health, 2010: *Tobacco Trends,* 2009). However, the prevalence reported for 2010 in the MMPO cohort is higher than that reported in the 2010 maternity report (data gathered on all pregnancies in 2010) (Ministry of Health, 2010b, 2012). Reasons for this difference are not known.

### *Specific groups with higher smoking prevalence*

Globally there are particular groups which continue to have a higher incidence of smoking than others. In New Zealand society smoking prevalence is related to age and ethnicity, with the greatest incidence of smoking found amongst people of Māori and Pasifika ethnicity and people under the age of 25 (Butler, Williams, Paterson, & Tukuitonga, 2004; McLeod, Pullon, & Cookson, 2002; Ministry of Health, 2010). The prevalence of smoking at pregnancy registration appears to be reflective of the general smoking prevalence for these groups within New Zealand society, with higher rates of smoking during pregnancy registration found amongst women who identified as Māori. Additionally a strong correlation was found between smoking and age, with smoking rates decreasing as age increased. This finding follows international trends, with a Scottish study reporting the highest smoking rates during pregnancy were in the under twenties (47%) followed by the 20-24 year age group (40%) (Bonellie, 2001). For the New Zealand women in this cohort who reported smoking at registration there continued to be the potential to change with fewer women smoking at postnatal discharge than at registration. The groups with the highest prevalence of smoking (under 25 years of age and who identified as Māori or Pasifika) also had the greatest reduction in smoking at completion of midwifery care.

A positive finding is the trend data which identified an on-going reduction in smoking prevalence during pregnancy for the under 16 years age group (from 49.4% in 2004 to 42.9% in 2010). This reduction is in line with the most recent Year 10 survey (ASH, 2011), which demonstrated the biggest decline in daily youth smoking since 2003/2004.

### *Parity*

Women's parity would appear to have an influence on smoking behaviour with a linear correlation found between increasing parity and smoking during pregnancy. Age and ethnicity are likely to have influenced this result with women of Māori ethnicity tending to give birth at a younger age, (median age of 25years) when compared to Pasifika women (28 years) and New Zealand European women (31years) (Ministry of Health, 2012). Additionally, the fertility rate for Māori women under the age of 25 years is higher than the rates of other ethnic groups (Statistics New Zealand, 2012).

An association with higher parity was identified as one of the factors linked to an increased risk of smoking in pregnancy (Butler, Williams, Paterson, & Tukuitonga, 2004). McLeod, Pullon, and Cookson (2002) found that women, who smoked throughout a previous pregnancy and had given birth to a healthy infant, were more likely to continue smoking and more likely to be smoking three years later. First time mothers have been identified as being more likely to spontaneously stop smoking in pregnancy (McLeod et al., 2002; Soloman & Quinn, 2004). Many women who are smoking at the start of pregnancy will attempt to modify their behaviour by spontaneously stopping or decreasing the number of cigarettes smoked (Ebert & Fahy, 2007). The reasons pregnant women give as to why they stop smoking are the desire to have a healthy pregnancy and reduce the risks of harm to the baby (McLeod et al., 2002). Additionally, social stigma and nausea or illness in early pregnancy may influence women to stop smoking (Soloman & Quinn 2004). Therefore the decision to stop smoking may not be due to a personal desire to cease smoking altogether and there is often a return to previous levels of tobacco use within the first few months following the birth (Coleman & Joyce, 2003).

International studies have found that women often resume smoking within days or weeks following the birth (Gaffney, Asher, Beckwitt, & Friesen, 2008; Letoureau et al., 2007). Reasons given for a return to smoking include stress, sleep deprivation, postnatal depression, the influence of a partner who smokes, as well as a wish to return to pre-pregnancy weight. (Letoureau et al., 2007; Levine & Marcus, 2004; Levitt, Shaw, Wong, & Kaczorowski, 2007). Women report limiting potential harm to their child by smoking outside or in another room (Kohorn, Nguyen, Schulman-Green & Colson, (2012). These findings imply that smoking cessation in pregnancy may be more of a suspension of smoking rather than a permanent behaviour change. This also suggests that women need support to transition from pregnant former smoker to a permanent non-smoker.

In our findings we demonstrate that a reduction in smoking prevalence has occurred by postnatal discharge from the midwife with discharge occurring between 4 and 6 weeks postnatally. Whether smoking cessation then continued cannot be measured by this study but this question would benefit from further investigation. Research is needed to record and analyse the smoking status of women for the first year following birth to establish the incidence of smoking relapse for women of childbearing age. This is especially important as our findings indicate that the greater the parity the greater the likelihood of smoking. Thus women may be stopping for the duration of pregnancy and initially after the birth but are smoking again for the next pregnancy. Returning to smoking following the birth not only exposes infants and children to the harmful effects of second-hand smoke, especially the risk of Sudden Unexplained Death of an Infant (SUDI) (Fleming & Blair, 2007), but also increases future reproductive health risks for the woman (ASH, 2009; Herrmann, King, & Weitzman, 2008; Shenassa & Brown, 2004).

## STRENGTHS AND WEAKNESS OF THE STUDY

This study has provided detailed and specific contemporary information on a large cohort of New Zealand women from LMC registration through to discharge. The data source is consistent and reliable and can provide a benchmark for measuring the impact of any future strategies designed to support smoking cessation during pregnancy.

The MMPO practice management system has several inbuilt features which reduce the risk of data entry error, adding to the integrity, validity and reliability of the data. In addition there is also the unique ability to link data from the antenatal period to the postnatal period which further enhances the usefulness of the findings.

There are several issues that added to the data limitations of this study. Firstly, accurate data collection was reliant on the women's self-reported responses concerning smoking status, which may be subject to self-denial or recall bias. Secondly, it is possible that some women had more than one birth in the three year period so there may be some duplication. Thirdly the cohort was under-represented for Māori, Pasifika and Asian ethnicity. Smoking status

was categorised according to either the number of cigarettes smoked or not smoking at both point of registration, and discharge. If a woman ceased to smoke between registration and discharge, the date at which she ceased was not recorded. No distinction was made between the women who smoke a relatively low number of cigarettes a day and those who smoke a high number.

## IMPLICATIONS FOR POLICY AND PRACTICE

The prevalence of smoking appears to have reduced over the seven years discussed in this research but the reduction is slow and more needs to be done if New Zealand is to reach the target of becoming smoke-free by 2025. Our findings support other New Zealand smoking data which demonstrate higher prevalence of smoking among women who identified as Māori when compared to women who identified as Pasifika, European and Asian ethnic groups along with women belonging to the lower age groups. (Butler et al., 2004; McLeod et al., 2002; Ministry of Health, 2010a; New Zealand College of Midwives, 2009). Smoking cessation support and service provision should meet the needs of these groups and be culturally sensitive and age appropriate.

Women need to be encouraged to become smoke-free for themselves as well as for the baby so that smoking cessation during pregnancy is a permanent change and not 'just for the pregnancy'. Rather an emphasis should be placed on being smoke-free for the first year of the baby's life, as a means of reducing the risk of SUDI and other infant morbidities. Midwives are the main providers of care for women during pregnancy and childbirth so it is important that education and support to discuss smoke-free pregnancy are continued, not only for midwives but also for all other health professionals involved in the care of women of childbearing age.

## RECOMMENDATIONS FOR FUTURE RESEARCH

The value of this study has been in its success in uncovering the trends related to smoking during pregnancy over seven years. The findings have provided a benchmark for future studies. It is important that the level of smoking during pregnancy continues to be measured and carefully analysed so that changing trends can be identified.

The link between parity and smoking requires further exploration, particularly as there are higher numbers of multiparous women within the Māori and Pasifika ethnicities who have the highest rates of smoking; it also needs to be considered when developing future smoking cessation programmes.

More research is required to understand how to motivate smoking cessation for the woman's health and not just for the baby's. This may be a crucial element in reducing the level of smoking within society. If women stop smoking for the duration of their pregnancy and the first year of their infant's life, the risk of smoking prior to and during any subsequent pregnancy will be reduced. Additionally, more research is required to assess and analyse smoking behaviour following birth to explore when the women recommence smoking and why.

## CONCLUSION

This study has provided data on the smoking behaviour of 81,821 women during the antenatal and postpartum periods of their pregnancies, in New Zealand from 2008 to 2010.The results demonstrate a small reduction in the percentage of women smoking during pregnancy over this three year period. Between pregnancy registration and discharge from postnatal midwifery care there is a further reduction in the percentage of women smoking. This study has examined ethnicity and age and found that these factors continue to affect the likelihood of smoking behaviour during pregnancy and the postnatal period. Parity was examined and a strong relationship between increasing parity and smoking prevalence was found. The data provide robust, reliable and valid evidence and when combined with the previous report revealed smoking trends and outcomes for a period of seven years. This ongoing assessment of smoking behaviour within a very specific subset of the population, provides an important link to the effectiveness of the strategies, policies and interventions aimed at reducing smoking in pregnancy and to the goal of New Zealand becoming a smokefree nation by 2025.

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PRACTICE ISSUE

# Pethidine: to prescribe or not to prescribe? A discussion surrounding pethidine's place in midwifery practice and New Zealand prescribing legislation


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## ABSTRACT

Changes to the New Zealand Misuse of Drugs Act (1975) regarding the prescription of opioids by midwives are currently under discussion. At this time, pethidine is the only controlled drug able to be prescribed by New Zealand midwives. Pethidine is a synthetic opioid which affects the transmission of pain signals to the central nervous system and induces a state of euphoria and sleepiness. It was first used in midwifery in the United Kingdom to sedate anxious women and was never intended to be prescribed for pain relief. Despite the widespread belief that pethidine is effective at reducing pain and shortening women's labours, the available evidence does not support this. Significant side effects for both the woman and the baby raise further questions about the suitability and safety of pethidine use in New Zealand maternity care. Relevant New Zealand legislation is currently under review with the potential for changes enabling midwives to offer a wider range of opioids. This article represents sections of a case study submitted as part of the requirements for the third year of study towards a Bachelor of Midwifery at Christchurch Polytechnic Institute of Technology (CPIT). It investigates the use of pethidine as a pharmaceutical method of pain relief in the New Zealand context, and the effects of its administration on the length of a woman's labour and on neonatal outcomes. Considerations for, and potential changes within, midwifery prescribing practices are then discussed



## KEY WORDS

Pethidine, analgesia, opioids, prescribing, midwives, New Zealand legislation


## INTRODUCTION

The Midwifery Council of New Zealand (MCNZ) and the New Zealand College of Midwives (NZCOM) are currently working with the Ministry of Health to negotiate changes to the Misuse of Drugs Act (MCNZ, 2013). This will impact on the scope for prescribing within midwifery, and will most likely mean that midwives will be able to prescribe a wider range of controlled drugs for use in intrapartum care. Midwives in New Zealand are legally able to prescribe a Class B controlled drug under the Medicines Act 1981 and Misuse of Drugs Act 1975 and their Amendments and Regulations. Currently, pethidine is the only controlled drug able to be prescribed by midwives but this may be expanded to a choice of three: pethidine, fentanyl and morphine. It is therefore timely to revisit the discussions surrounding the use of pethidine as analgesia in childbirth.

Pethidine is a widespread and current pain management option utilised in New Zealand midwifery practice and is widely available in New Zealand hospitals (Lee & Ho, 2004; Saravanakumar, Garstang & Hasan, 2007). Lee and Ho's published survey in 2004, investigating the use of obstetric analgesia in New Zealand hospitals, indicated 96% of obstetric facilities in New Zealand used intramuscular pethidine, and 70% used intravenous pethidine (including patient-controlled analgesia) for analgesia (Lee & Ho, 2004). In 2011, pethidine was used by 9.7% of all birthing women using an MMPO member Lead Maternity Carer (LMC) in New Zealand (NZCOM/MMPO, 2012). MMPO, the Midwifery and Maternity Providers Organisation, is a service which provides practice management support to self-employed member midwives including maternity notes and a claiming system that collates and reports on maternity data from birthing women registered with MMPO-member LMCs. Data is collected from the practice information and outcomes generated by its members. Membership is voluntary for self-employed midwives and in 2011 there were 866 member midwives across New Zealand contributing data from 31,739 birthing women, (NZCOM/MMPO, 2012). A total of 32,083 babies were born to these women. The MMPO data therefore represent 51.9% of all registered births in New Zealand in 2011 (NZCOM/MMPO, 2012). Women not included were cared for by non-MMPO LMC midwives or District Health Board (DHB)-employed midwives providing intrapartum care. National data from DHBs are not generally available, but Auckland DHB does produce and make public its statistics in an annual report of data collected from midwives working in their Labour and Birth suite at National Women's Hospital. The National Women's Annual Clinical Report for 2012 reported a pethidine usage rate of 8.9%, down from 15.5% in 2010, a decrease which they commented was "in keeping with international trends" (Auckland District Health Board 2012, p.99).

Pethidine may be used by New Zealand midwives in all settings and is usually administered with an anti-emetic as per the NICE guidelines (National Institute for Health and Clinical Excellence, 2007) owing to the nausea and vomiting it often induces. It may be that pethidine was originally chosen for midwifery use in New Zealand because of tradition

and cost rather than through robust consideration of evidence and alternatives. Tuckey, Prout and Wee (2008) found that the majority of consultant and midwife-led units in the UK (84.4%) used pethidine over diamorphine or morphine due to tradition and familiarity rather than drug efficacy. Panda, Desbiens, Doshi and Sheldon (2004) found that the low cost of pethidine also influenced its choice.

This article represents sections of a case study submitted as part of the requirements for the third year of study towards a Bachelor of Midwifery at the Christchurch Polytechnic Institute of Technology. It investigates the use of pethidine as a pharmaceutical method of pain relief and the effects of its administration on the length of a woman's labour, neonatal outcomes, and the woman's experience. Implications and considerations for midwifery practice, potential changes to prescribing legislation, and areas for further research are highlighted.

## PHARMACOLOGY OF OPIOID DRUGS

Opiates are naturally-occurring substances derived from the opium poppy which bind to opioid receptors in the central nervous system (the brain and spinal cord). A range of opioid substances exist which have the same pharmacological action as natural opiates. Pethidine is one such synthetic opioid. All opioid drugs affect transmission of pain to the central nervous system so that perception of, and emotional response to, pain is diminished and a state of euphoria and sleepiness/sedation is induced (Mander, 2011; Yerby, 2000).

Each opioid comes with its own selection of side effects dependent on its action on central nervous system receptors. When the caregiver is considering opioids for pain relief in labour, the optimal choice will have rapid onset of effect, be efficiently metabolised and eliminated, and have minimal side effects (Anderson, 2011). Pethidine, morphine and fentanyl work primarily on mu receptors, which are responsible for mediating sedation, analgesia, nausea, vomiting, pruritis, euphoria, respiratory depression, and urine retention (Anderson, 2011). These bodily responses will therefore be enhanced when the drug is used, producing unwanted side effects. Of the three drugs being considered, pethidine is the weaker agonist and thus the less potent analgesic. Furthermore, pethidine produces an active metabolite, norpethidine, which has a very long half-life. Norpethidine and its effects on the baby will be discussed later in this article. A comparison of half-lives can be seen in Table 1.

### ***Table 1:*** Opioids, dose and half-life (Calvert, Hunter & Eddy, 2012)

| Drug | Usual Dose | Half-Life |
|---|---|---|
| Pethidine | 100 mg | **Pethidine**<br>Maternal 3-7 hours<br>Neonate 18-23 hours<br>***Metabolites**<br>Adults 21 hours<br>Neonate 63 hours |
| Morphine | 10 mg | **Morphine**<br>Maternal 43 minutes<br>Neonate 6.5 hours<br>***Metabolites**<br>Adults 2-4 hours<br>Neonate 13.9 hours |
| Fentanyl | 100 mcg Intermittent intravenous bolus doses | **Fentanyl**<br>Adults 3-4 hours<br>Neonates 1-7 hours<br>**No active *metabolites** |

*Metabolites are small molecules produced during metabolism which remain in the body after a drug is broken down. Profiling metabolites is an important part of drug discovery, leading to an understanding of any undesirable side effects (Kumar, Abbas, Fausto & Aster, 2009; Anderson, 2011).

## HISTORY OF USE IN MIDWIFERY

The ability to achieve sedation and pain relief through chewing or ingesting opium poppy seeds has been known about for centuries. The actual extract of morphine from the opium poppy was first discovered in 1805. The name, morphine, was coined by a German pharmacist, Adolf Serturner (1905), who took it from Morpheus, the mythological god of dreams. Morphine extract enabled a specific, measured dose to be swallowed as a liquid. It was not until the syringe and needle were invented in Edinburgh, Scotland, in 1853 that morphine could be given via injection. Morphine was first used for women in labour in the early 1900s. It was initially mixed with other sedatives and injected into the woman's vein to induce what was called 'twilight sleep'. These drugs usually made the woman semiconscious (or totally unconscious), often leaving her with no memory of the actual birth (Leavitt, 1980; Sandelowski, 1984).

Pethidine itself was first used in Germany in 1939 as sedation and pain relief for wounded troops during the Second World War (Squire, 2000). It spread rapidly throughout society and was widely celebrated by women suffering dysmenorrhoea, so much so that by the late 1940s many were addicted. Its use became regulated in 1949, around the time midwives began using it for labour (Squire, 2000). In midwifery, pethidine was referred to as "sedation" and was used to reduce anxiety in labour (Bamfield, 1997). This practice of using such sedative type drugs to "induce sleep… and relax rigidity of the soft parts" and therefore improve slow progress in childbirth has been used across the history of labour care (Fairbairn, 1918, cited in Bamfield, 1997, n.p.). Yet, pethidine is now generally regarded as an analgesic despite its lack of pain-relieving ability. Historically it is suggested that it was only ever used to help relax/sedate a woman, thus reducing her "rigidity" and speeding her labour progress. The poor analgesic effectiveness of pethidine is the topic of much discussion. Therefore, examining the effectiveness of pethidine for reducing length of labour, and women's experience of its relaxing/sedating effect, appears more appropriate than critiquing its actual analgesic efficacy.

## PETHIDINE USE TO SHORTEN LABOUR

The evidence surrounding the effect of pethidine on length of labour is scant. Pethidine did not undergo randomised controlled trials (RCTs) prior to its introduction into clinical practice; instead its results were documented through case studies (Shipton, 2006). Most studies were single-arm trials carried out between the 1940s and 1960s which makes the quality and relevance of their results questionable. Some authors concluded from these studies that pethidine shortened labour, others claimed it lengthened labour, and still others decided it did both, depending on which stage of labour it was given (Thomson & Hillier, 1994; Crafter, 2000; Hill & McMackin, 2012). A letter to the editor of the British Medical Journal in July 1947 conveys the most commonly held theory that had emerged by this time - that pethidine relaxed women enabling labour to progress. The author claimed that in cases of "rigid cervix", women were so completely relaxed by pethidine that labour was shortened "dramatically" (Waters, 1947, p. 71).

Thomson and Hillier (1994) state that it has long been recognised within midwifery in the UK that pethidine relaxes women and that their labours then progress rapidly. They were surprised when a pilot randomised controlled trial comparing pushing methods inadvertently highlighted longer labours for the women who given pethidine. The difference was statistically significant (p=0.01, 95% CI). Following this discovery, an attempt by Thomson and Hillier (1994) to carry out a review of trials investigating pethidine and length of labour failed to find sufficient evidence due to a lack of RCTs. The authors were forced to conclude that pethidine's effect on labour length had not been adequately studied and no conclusions could be drawn.

In 2004 a randomised controlled trial of 407 women was conducted in Uruguay where pethidine is frequently used to treat dystocia in the first stage of labour (Sosa et al, 2004). This is the only available high quality RCT focusing on length of labour and the authors found no significant difference in the total length of labour between women receiving pethidine

and those receiving a placebo. There was an increase in adverse effects for women receiving pethidine, especially dizziness (relative risk 4.68, 95% CI) and the need for oxytocin augmentation; there was also a higher incidence of Apgar scores <7 at 1 minute of age (relative risk 4.11, 95% CI) (Sosa et al, 2004). A small RCT with 150 labouring women in Iran found similar results, with no significant difference in length of labour for women receiving either pethidine or a placebo (Sekhavat & Behdad, 2009). Mansoori, Adams and Cheater (2000) found that women in their cohort study receiving pethidine had longer labours compared to women with no pain relief, but shorter labours than those with epidural anaesthesia ($p<0.001$, 95% CI). From reviewing the available literature there is no evidence to support pethidine as a method of shortening labour despite the apparent widespread belief dating from the 1940s of its ability to do this.

## SEDATION AND THE WOMAN'S EXPERIENCE

A recent Cochrane systematic review of opioids in labour found that they all provide poor pain relief (Ullman, Smith, Burns, More & Dowswell, 2011). Opioids all caused significant side effects including drowsiness and nausea. However, the authors state that the studies available were of poor quality, with largely insignificant results and their review failed to provide sufficient evidence for or against pethidine compared with other opioids.

Many of the available studies compare pethidine to other opiates to investigate effectiveness of pain relief, the appropriateness of which was questioned earlier. For example, Fairlie, Marshall, Walker and Elbourne (1999) found that diamorphine was moderately superior at relieving pain and resulted in less vomiting than pethidine. A frequently quoted study by Olofsson, Ekblom, Ekman-Ordeberg, Hjeml, and Irestedt (1996) highlighted the ineffectiveness of all opioid drugs on labour pain, and found no significant change in pain scores following pethidine or morphine administration. In their study, 75% of women went on to request an epidural, and significantly more women receiving pethidine experienced nausea and vomiting than those receiving morphine ($p<0.03$, 95% CI). However, pethidine was more effective at calming women ($p<0.03$, 95% CI) although both drugs caused significant maternal sedation (Olofsson et al, 1996). As the authors state, these results support pethidine's ability to dull emotional reaction to pain (sedate), rather than to provide 'true analgesia'. This is also supported by Kranke et al. (2013) who describe both pethidine and morphine as causing heavy sedation. A recent study by Madden, Turnbull, Cyna, Adelson and Wilkinson (2013) surveyed 123 women about their experiences of a range of physical, psychosocial and pharmacological methods of pain relief and found that pethidine was the least preferred of all methods.

New Zealand women have the benefit of continuity of midwifery care and the opportunity to discuss pain relief options in depth with a known caseloading community-based midwife throughout their antenatal period. Comments from New Zealand women on online fora appear to show an understanding of the way pethidine works and an acceptance of its use as a sedative rather than a pain killer, although not all women enjoyed the sensations:

> *It made me so relaxed and distanced myself from the pain (anonymous contributor to OHbaby!, 2012).*

> *I found pethidine took the edge out of the contractions and that helped me relax and allow the cervix to do its job without me fighting it coz of the pain it was causing, which in result did help speed up the dialating [sic] of cervix (anonymous contributor to Treasures, 2010).*

> *I had pethidine - it made me feel really out of it and I felt like I was not in control (anonymous contributor to Treasures, 2010).*

Feeling out of control as an effect of pethidine has been highlighted by Jantjes, Strumpher, & Kotze (2007). The authors reported dizziness, confusion, and sleepiness, and stressed the importance of midwives informing women of these expected effects. The ethics of offering a woman a drug known to have little analgesic effect but significant sedative effects, which could impact her ability to make decisions or even remember her labour, must be considered.

From reviewing the available literature there is no evidence to support pethidine as a method of shortening labour despite the apparent widespread belief dating from the 1940s of its ability to do this.

## SIGNIFICANT FETAL AND NEONATAL CONCERNS

Pethidine readily crosses the placenta with maximum levels found in the baby's bloodstream between one and five hours following maternal administration (Tuckey, Prout & Wee, 2007). Fetal effects include reduced short term beat-to-beat variability of the fetal heart and neonatal effects include reduced Apgar scores, depressed muscle tone, respiratory effort, and sucking ability (Reynolds, 2010; Hill & McMackin, 2012). Other studies have raised additional concerns regarding the potential association between use of opioids in labour and development of neonatal drug dependency in later life, though this has not been proven (Nyberg, Allebeck, Eklund & Jacobson, 1993; El-Wahab & Robinson, 2011; Jacobson et al, 1990; Nyberg et al, 2000).

A randomised controlled trial by Sosa et al (2006) found decreased umbilical cord pH between four and six hours after maternal administration, with the lowest level at 4.94 hours. In her recent literature review, Reynolds (2011) stated that acidosis and respiratory depression in babies are maximised if pethidine is given three to five hours before birth but are barely discernible if given within an hour of birth since the drug has not reached sufficient levels in the baby. This is in contrast to the widely-held belief that pethidine's effects are most detrimental to babies when given close to the birth (personal communication and anecdotal evidence, 2010-2012). Regardless of their effects on respiratory depression, the longer lasting influence of pethidine's metabolites will persist regardless of timing of dose. These effects may be more subtle or 'hidden' at birth, but will go on to affect the baby for several days while the original dose of pethidine is being metabolised by the baby's liver.

Pethidine is metabolised to norpethidine, a toxic substance which can increase serotonin levels in the central nervous system and is a potent convulsant. It has a half-life of 14 to 21 hours in adults (Shipton, 2006). This half-life is much longer than that of morphine and its metabolite, or of fentanyl (see Table 1). The accumulation of norpethidine in babies is potentially more dangerous owing to babies' reduced elimination abilities and norpethidine's extremely long half-life of 63 hours (Calvert, Hunter & Eddy, 2012; Anderson, 2011). An opiate antagonist, naloxone, is available to treat babies experiencing respiratory depression but its effects wear off before those of pethidine due to naloxone's relatively short half-life. Naloxone is not effective against norpethidine itself. A review of naloxone failed to find enough evidence of clinical benefits for its use as part of resuscitation of babies born to mothers who had received pethidine and recommended further research in the form of randomised controlled trials (Fowlie & McGuire, 2003). Herschel, Khoshnood and Lass's study

(2000) also found little significant benefit for the use of naloxone and recommended its use to be re-evaluated. Further quality research into this area would be useful.

An area of concern is the prolonged sedative effect on newborns and how this impacts on their ability to breastfeed. Pethidine and norpethidine accumulate in colostrum and mature breast milk (Anderson, 2011). A study by Wittels et al cited in Anderson (2011) found significantly more neurobehavioural depression in breastfeeding newborns exposed to pethidine than those exposed to an equivalent dose of morphine, and those effects extended to the third and fourth days of life. A 2001 study of video recordings of newborns found that babies whose mothers had received opioid analgesia made fewer hand-to-mouth movements ($p<0.001$), licking movements ($p<0.001$), and demonstrated reduced ability to suck and sustain a latch (Ransjo-Arvidson et al, 2001). These babies also had higher temperatures and cried more. However, mothers in the analgesia group received pethidine, epidurals or a combination of two or three types of analgesia, so the impact of pethidine alone cannot be reliably extrapolated from this study. Despite published concerns across many years regarding the effects of opioids on neonatal behaviour and breastfeeding, very few trials report breastfeeding as an outcome. In a recent Cochrane systematic review, only two out of 57 trials included this (Jones et al, 2013). It is therefore recommended that breastfeeding as an outcome measure is included in all future trials investigating pain management in labour.

## IMPLICATIONS FOR PRACTICE

Opioids are sedatives which alter pain perception rather than provide true analgesia. The NZCOM (2011) consensus statement "Prescribing and Administration of Narcotic Analgesia in Labour" states the importance of informing women antenatally about the expected effects of sedation and limited analgesia. The NICE guidelines (2007) also recommend that the limited pain relief provided by pethidine is explained in advance to women. Standard Two of the New Zealand Midwifery Standards of Practice states that "the midwife shares information and is satisfied that the woman understands the implications of her choices" (NZCOM, 2008, p. 16). The partnership model of midwifery in New Zealand offers women the balance of power to direct their care, make choices, and to work alongside their LMC in the antenatal period to formulate a birth plan. Continuity of care enables topics to be explored time and again with the same midwife in order for the woman to be satisfied that she has exerted her fully informed choice in developing her preferences for managing labour and pain relief options. This prior antenatal discussion ensures that the midwife is practising within the New Zealand Midwifery Code of Ethics (NZCOM, 2008) by upholding the woman's right to informed choice and control over her childbirth experience.

The NZCOM Midwifery Standards of Practice (2008), NZCOM Code of Ethics (2008), NZCOM consensus statement (2011) and the NICE guideline (2007) all seem to suggest that pethidine has a limited place in the 'midwifery toolbox'. The NZCOM consensus statement (2011) does not recommend its use, and the ongoing MCNZ and NZCOM Health Select Committee submissions are indicative that the profession is aware of the need for change in the availability of, and education surrounding, all opioids within midwifery. Standard Five of the NZCOM Midwifery Standards of Practice states that midwives must "consider the safety of the woman and baby in all planning and prescribing of care" (NZCOM, 2008, p. 19). Furthermore, NZCOM Standards Seven and Ten advise that a midwife "must ensure her practice is based on relevant and recent research" (p.21) and "share research findings and incorporate these into midwifery practice" (NZCOM, 2008, p. 24). This reinforces the need to be mindful that pethidine is a sedative, causing drowsiness, nausea, adverse fetal effects and is reported as an inferior pain relieving agent. While nausea can be managed by appropriate anti-emetics, other opioids exist, like fentanyl, which warrant consideration as potentially safer options to introduce into midwifery practice.

The profession is aware of the need for change in the availability of, and education surrounding, all opioids within midwifery.

## TO PRESCRIBE OR NOT?

In midwifery, it is difficult to hold any single view on any issue when every woman's situation is unique. There may, therefore, be times when judicious use of pethidine is warranted, at least until a wider choice of opioid is available. A midwife working in a primary birthing unit recently explained how "it won't take the pain away, but it will take her away from the pain" (personal communication, October 2012). This statement perfectly encapsulates the action of pethidine and shows how the sedating effects may at times be of some use. Pethidine could be recommended as a method of reducing anxiety if a woman is struggling during labour, helping her to become temporarily distanced from the stress she is feeling. The first stage of labour can be long, and another possibility for pethidine is to induce sleep or rest during this time. Rural transfers, or other situations where alternative analgesia is unavailable or delayed, may be times when pethidine may be appropriate. Further, each woman will react to the feelings of sedation differently. Not every woman will experience unpleasant side effects and women who have had a previous good experience with pethidine may request it again.

Midwives working within the New Zealand partnership model listen to, and communicate effectively, with women, and use their professional judgement taking into account their knowledge of the women and their wishes, stage of labour, and other supportive measures that may be appropriate instead of, or alongside, pharmaceuticals. The benefits of continuity of care from a named community-based midwife - who knows the woman, and has a pre-existing partnership with her - are evident. Whether any pharmaceutical drug is a culturally safe option will also depend on each individual woman, her personal philosophy and viewpoint.

Midwives in New Zealand practise within the NZCOM Code of Ethics (NZCOM, 2008). The Code requires midwives to accept the right of each woman to control her experience, to not interfere with the normal process of birth, and to ensure no action places the woman at risk (NZCOM, 2008). Giving a woman pethidine risks making her feel out of control. However, the final choice whether to receive pethidine rests with the woman, not the midwife. Women's choice is protected in New Zealand by the HDC Code of Health and Disability Services Consumers' Rights 1996, where all consumers of a health or disability service have the right to make an informed choice and give informed consent (Health and Disability Commissioner, 2009). It would be unethical to deny a woman something she has chosen if the midwife is satisfied the woman is aware of the risks and benefits. Yet, this raises the question of how much evidence of risk is sufficient for a substance to be labelled categorically unsafe. No midwife would be willing to administer a known fatal poison to a woman, no matter how much she asked for it. It is appreciated that this is therefore a complex issue with no clear answers.

## PRESCRIBING LEGISLATION UNDER REVIEW

From the above critical review, it is difficult to recommend the use of pethidine as an effective and safe analgesic for use during labour. However, in the current absence of more suitable options it continues to be the most widely available pharmaceutical in midwifery excepting Entonox

Legislation is under review and it is anticipated that in time New Zealand law may be changed to enable midwives to prescribe morphine and fentanyl as well as pethidine.

(a gas consisting of 50% nitrous oxide and 50% oxygen), and is the only controlled drug able to be prescribed by New Zealand midwives. The MCNZ considers the prescription of opioid drugs to be within the midwifery scope of practice (MCNZ, 2011); midwives are legally able to prescribe a Class B controlled drug under the Medicines Act 1981 and Misuse of Drugs Act 1975 and their Amendments and Regulations. The NZCOM expects midwives to be competent to prescribe pethidine within their scope of practice (NZCOM, 1995).

It has recently been suggested that the legislation restricting the prescription of controlled drugs to pethidine only is removed, and a gazetted list of controlled drugs is implemented instead. On the 5th of April 2011 the MCNZ and NZCOM filed a submission to the Health Select Committee supporting the intent of the upcoming Medicines Amendment Bill to review and amend the Misuse of Drugs Act. This is still a work in progress (MCNZ, 2013). The current legislation may be directed by tradition rather than evidence (Tuckey, Prout & Wee, 2008). This legislation is perhaps out of date, since recent evidence suggests that other opioids, namely morphine or fentanyl, may be safer for babies and cause fewer adverse effects than pethidine (MCNZ, 2011). The New Zealand College of Midwives supports this view (NZCOM, 2012). Expanding our legislation would also bring New Zealand in line with other countries where midwives can autonomously prescribe or administer opioids, such as the UK which uses a variety of opioids depending on district, British Colombia which uses morphine and fentanyl, and Australia which uses morphine and fentanyl as well as pethidine (Calvert, Hunter & Eddy, 2012).

The most recent submission from the MCNZ and NZCOM in May 2012 highlighted the long half-life of pethidine and effects on newborns (Calvert, Hunter & Eddy, 2012). The potential for prolonged sedation and other effects discussed earlier has been highlighted. At the time of the submission by the MCNZ and NZCOM, two New Zealand District Health Boards have already stopped offering pethidine and are now using either fentanyl or morphine, administered by midwives but prescribed by doctors (Calvert, Hunter & Eddy, 2012). Fentanyl has the added benefit of no active metabolites and thus there is no concern around prolonged side effects or accumulation in the baby. Fentanyl has also been associated with fewer maternal side effects than pethidine (Rayburn et al, cited in Anderson, 2011).

## CONCLUSION

Pethidine offers temporary, relatively weak analgesia. It is an effective sedative, inducing sleepiness, and reduced awareness and control. It has long been believed that pethidine shortens labour but the current available evidence suggests this is not the case. Ideally, opioids chosen for midwifery use will have rapid onset of effect, be efficiently metabolised and eliminated, and have minimal side effects. Pethidine causes more side effects than other opioids such as morphine and fentanyl; these other drugs have shorter half-lives and may also have fewer undesirable effects on newborns. Further research into the use of naloxone in resuscitation, and opioid effects on breastfeeding and newborn behaviour, is essential while opioids continue to be used for childbirth.

Antenatal and intrapartum discussion and support are key aspects of midwifery practice which should address the evidence and women's wishes surrounding pain management. The New Zealand partnership model provides an excellent opportunity for women who choose an LMC midwife to discuss and formulate individual plans for pain management in labour. At this time, pethidine is the only controlled drug New Zealand midwives may prescribe. Legislation is under review and it is anticipated that in time New Zealand law may be changed to enable midwives to prescribe morphine and fentanyl as well as pethidine. This will open the door for richer discussion and wider choice for midwives and women.

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# Partnership and reciprocity with women sustain Lead Maternity Carer midwives in practice

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## ABSTRACT

New Zealand has a unique maternity service model, whereby women at low risk of complications receive their maternity care from a community based Lead Maternity Carer (LMC) who is usually a midwife, but could be a general practitioner or an obstetrician. Over 80% of women in New Zealand choose to have a midwife as their LMC (Grigg & Tracy, 2013; Guilliland & Pairman, 2010). LMC midwives practise under contract to the Ministry of Health, taking a caseload and providing continuity of care (which requires being on call) for the women booked with them.

This qualitative descriptive research set out to understand what sustains on call case- loading LMC midwives who have practised as LMCs for at least eight years. Eleven midwives with 8 to 20 years in practise were recruited and interviewed. Thematic and content analysis was carried out on the data. This article presents an overview of the findings from this study and extracts of selected data.

Themes emerged from the findings which described how midwives were sustained in on call, caseloading practice. Themes identified include: the joy of midwifery practice; working in partnership; supportive family relationships; supportive midwifery relationships; generosity of spirit; like-minded midwifery partners, practice arrangements; managing the unpredictability of being on-call; realising one is not indispensable; learning to say "no"; negotiating and keeping boundaries; and passing on the passion for midwifery. This paper is the first in a series. It explores the themes of partnership, and how working in partnership sustains the joy of practice and provides context to the study. Future papers from the study will report on other themes from the study. The significance of this research is that it informs present and future maternity service provision and education.

## KEY WORDS

Caseloading, midwives, partnership, reciprocity, sustainability

## INTRODUCTION

Sustainability of the Lead Maternity Care (LMC) model is a topic of interest to midwives and other health professionals both nationally and internationally. In the context of this study, sustainability means to enable something continue to exist, whilst maintaining the integrity of the mental and physical wellbeing of the agent. Women in New Zealand choose their LMC who may be a midwife, a general practitioner or an obstetrician. The LMC service is government funded so that maternity care is free for the woman (excepting for those who choose a private obstetrician who charges an additional fee for service) and provided for all New Zealand women regardless of where they choose to birth (Ministry of Health, 2007). LMCs can also be general practitioners who need to employ a midwife. LMCs who are midwives practise on their own authority, provide continuity of midwifery care throughout pregnancy, labour, birth and up to six weeks of the postpartum period for women who choose to book with them. LMC midwives are legally able to access named maternity facilities within their local maternity system. Midwives collaborate with other health professionals when the woman's circumstances require. They consult and refer to their obstetric colleagues when childbirth deviates from normal (Midwifery Council of New Zealand, 2013). There is an agreed set of criteria for consultation and referral (Ministry of Health, 2012).

There is a high level of satisfaction expressed by the majority of New Zealand women with the LMC model of care (Ministry of Health, 2011) and midwives working in continuity of care with women find this a satisfying way to work. LMCs are able to provide midwifery care across primary and secondary services. In their systematic review of Randomised Controlled Trials examining the benefits of continuity of care Sandall, Devane, Soltani, Hatem, & Gates (2010), found that midwifery led care improves maternity outcomes. In their Australian study, Tracy et al., (2013) found midwifery led care to also be economically beneficial. The challenge for midwives is to sustain this model of practice, especially being on call (McLardy, 2003). This research investigates what sustains LMC midwives in practice over a number of years. The issue of sustainability at the present time is being explored not only in relation to the environment but in every aspect of life, business and service provision. Kirkham (2011) goes so far as to say that midwifery as a model of care is not only sustainable but it also contributes to society's sustainability. The philosophy which underlies midwifery is strongly aligned with sustainability since midwives promote normal (physiological) birth that aims to keep childbirth interventions to a minimum; only using interventions judiciously when clinically

required. This means that midwifery care is not resource intensive (Davies, Daellenbach, & Kensington, 2011). It is estimated that the accumulation of childbirth interventions increases the relative cost of birth by up to 50% for low risk primiparous women and up to 36% for multiparous women (Dahlen et al., 2012). Caesarean section is the most expensive mode of delivery (Allen, O'Connell, Farrell, & Baskett, 2005). Rising rates of intervention, which are not associated with improved outcomes, are of concern both in terms of morbidity for low risk women and their cost to the state (Dahlen et al., 2012).

Hence physiological birth is sustainable economically but we also argue provides sustainable long term benefits to the woman and her baby. Walsh (2008) and Beech and Phipps (2008) claim that physiological birth may result in improved maternal-infant attachment, less Post Traumatic Stress Disorder (PTSD) and better parenting. The other important contribution which midwifery makes to sustainability is that midwives support health practices which positively contribute to the ongoing health and wellbeing of women and their families (Davies et al., 2011).

While the midwifery model of care is sustainable it is also important to understand what sustains the midwives who provide the service. In the United Kingdom (UK) researchers recruited midwives with greater than 15 years of clinical experience and interviewed them about their understanding and experience of resilience. The findings of this research identified managing and coping, self-awareness and the ability to build resilience as key to resilience in midwifery practice (Hunter & Warren, 2013). Hunter and Warren (2013) identified the need for further research which explores the resilience of midwives in different settings as they believe it will provide insight into sustainable practice.

This study focusses on the New Zealand LMC model of midwifery care which provides continuity of care and is embedded in the New Zealand maternity system. In other regions in the world continuity of care remains sporadic and not woven into the maternity system as a whole. Recent research on the experience of caseloading midwives in New Zealand has focused on issues related to the challenges of being on call, providing continuity of care, work/life balance and burnout (Cox & Smythe, 2011; Donald, 2012; Young, 2011). While these studies offer important insights into the experiences of midwives, the literature seems incomplete without the voice of what does sustain LMC (NZ caseloading) midwives. Although some themes are shared in the continuity of care international literature the New Zealand maternity model is able to provide new insights into how such provision is sustainable. This research positions itself to address these gaps in the literature in relation to the sustainability of LMC midwifery practice by giving voice to how a selected group of midwives have sustained the LMC model of midwifery care over their practice lives.

## RESEARCH METHODS AND METHODOLOGY

A qualitative descriptive methodological approach was used in this research. The theoretical framework that informs the study is the paradigm of 'naturalism' in so far as the researcher seeks to gather information and describe a situation as it occurs (Burns & Grove, 2001; Sandelowski, 2010). A qualitative descriptive approach facilitates the interpretation and analysis of findings remaining 'data near' (Sandelowski, 2010). This type of methodology is particularly useful when describing a phenomenon such as sustainability of practice as it enables the 'what' and 'how' to be shown and facilitates the process of eliciting stories and insights from midwives about the sustainability of their practice (Neuman, 2011).

Ethical approval for this study was obtained through the Auckland University of Technology Ethics Committee (AUTEC). Data collection took place during 2011 and 2012. Eleven participants, from rural and urban areas across New Zealand who had been in practice a total of between 8 and 20 years, were interviewed. Purposive sampling using the researchers' professional networks meant that midwives who met the research inclusion criteria were able to be reached and recruited. The midwives were contacted by email, phone or in person and given the information about the study and asked if they wished to participate. Semi-structured and open-ended questions were used so that participants could readily present their practice and what sustains them in practice. Each interview took approximately 45-90 minutes and was audio taped and transcribed. Transcripts were returned to the participants when requested and when clarification was required. Confidentiality was maintained by the use of pseudonyms and details were changed that might readily identify the participant.

While the midwifery model of care is sustainable it is also important to understand what sustains the midwives who provide the service.

Thematic and content analysis was the method used to analyse data. A systematic analysis of the content was undertaken providing a provisional analysis, which facilitated data then being grouped into themes. These themes were then analysed by members of the research team. The analysis was brought back to the whole group for peer review and comment. The data were then further analysed using the comments from the peer review. During this process there was also a linking of themes, which showed a relationship to each other. This method meant that data rich in detail were collected and this enabled a description of the experience, followed by an identification of the themes and emergence of patterns across the midwives' practices. In this way an understanding of what sustains the midwives in LMC practice was formed.

## LITERATURE AND SUSTAINABILITY OF MIDWIFERY PRACTICE

The sustainability of different models of midwifery care and, in particular, LMC caseloading midwifery in New Zealand, has been of interest for a number of years (Davies et al., 2011; Donald, 2012; Earl et al., 2002; Engel, 2000, 2003; Homer, Brodie, & Leap, 2008; McLardy, 2003; Sandall, 1997; Wakelin & Skinner, 2007; Young, 2011). A review of the literature shows there is limited national or international research regarding what sustains midwives in on call, caseloading practice. In 1997, Sandall's UK research, identified three themes that avoid burnout and positively contribute to sustainable midwifery practice in a continuity of care model. These factors were: occupational autonomy, meaningful and positive working relationships and supportive relationships at home (Sandall, 1997). Research since then has supported these findings but has also presented new factors which sustain—such as the relationship between the woman and midwife and the midwife's role in helping women achieve a 'good' birth (Sandall, Devane, Soltani, Hatem, & Gates, 2010). In New Zealand, the model of midwifery care, wherever the midwife practices, is philosophically based on woman-midwife relationship being one of partnership. This relationship is one of reciprocity and trust and has long informed the midwife-woman relationship in New Zealand (Guilliland & Pairman, 1994). The nature and quality of relationship between the midwife and the woman and her family/whānau is a significant factor in a number of studies, along with the partnership and reciprocity that is developed through continuity of care (Deery & Hunter, 2010; Hunter,

Berg, Lundgren, Ólafsdóttir, & Kirkham, 2008; Leap, Dahlen, Brodie, Tracy, & Thorpe, 2011).

Kirkham (2011) claims that models of care where midwives are autonomous are an important feature of sustainable midwifery. In England some midwives leave midwifery because they cannot practise autonomously. (Curtis, Ball, & Kirkham, 2006). The ability to practise autonomously and provide continuity of care, as in New Zealand, may create a more sustainable midwifery model. Kirkham (2011) believes that midwives in the UK value the New Zealand model where a woman chooses a midwife and midwives provide care for individual women. If autonomy and continuity of care are an important part of the sustainability of the maternity service, it is of the utmost importance that there is research to identify what sustains those who provide this service.

Recent New Zealand research on LMC caseloading midwifery has focused primarily on the issues of continuity of care and carer, workforce, work/life balance, and burnout (Cox & Smythe, 2011; Donald, 2012; Wakelin & Skinner, 2007; Young, 2011). Research has been undertaken on LMC caseloading midwifery and its impact on midwife's home-life identified the importance of boundaries (Engel, 2003). A survey of LMC midwives showed that continuity of care and the quality of relationships both sustained and were problematic for some midwives in supporting them in their practice (Wakelin & Skinner, 2007). LMC midwives in New Zealand, or their backup midwives, are available 24 hours a day, 7 days a week, to provide phone advice to the woman and assessment of urgent problems (Ministry of Health, 2007). Young (2011) showed that, within the provision of LMC midwifery service and the demands of on call, there is real potential for burnout. These findings are echoed in Donald's (2012) research on LMC practice and work and life balance, which concluded that midwives needed to ensure that they met their need for regular time off as well as meeting women's needs.

Throughout all of this research into LMC caseloading midwifery, whether the topic was burnout, work and life balance, or continuity of care, there was a common thread that midwives be passionate about, and find a real joy in midwifery (Cox & Smythe, 2011; Donald, 2012; Leap, Dahlen, Brodie, Tracy, & Thorpe, 2011; Young, 2011). In an Australian study, Leap, Dahlen, Brodie, Tracy and Thorpe (2011) audio taped their own personal conversation about midwifery models of care and, in analysing the conversation, identified crucial elements of sustainability. They claim, as had researchers from the UK that relationships are the most important aspect of sustainability. Building positive relationships with women, between midwives and with maternity care systems, ensured sustainable practice (Leap et al., 2011). In this conversation, however, other important aspects of sustainability were identified including good will, generosity of spirit, trust, feeling connected and taking care of one's self. They also made a case that sustainable midwifery practice required midwives to work with like-minded colleagues who shared the same philosophical beliefs. The conclusions that emerged from this conversation among midwives around a kitchen table, published under the heading 'Relationships – the glue that holds it all together', are confirmed by the findings of our research.

## RESEARCH FINDINGS:

The midwives in this research articulated that it is relationships with women, midwifery practice partners, the midwifery community at large, and families and friends that sustain them in practice. Participants identified that the important features of sustainable relationships with midwifery practice partners are that partners are philosophically aligned, support each other in practice and on a personal level. Organised practice structures and arrangements that allow for regular time off were other aspects found to sustain LMC midwifery practices. The participants in this study spoke often about a generosity of spirit between midwifery partners as one of the single most important ingredients sustaining this relationship. Midwives also recognised supportive partners, families and friends who sustain them both practically and emotionally. In terms of relationships with women, midwives spoke of keeping the partnership with women safe by negotiating and creating safe boundaries. This means having the ability to say "no", and realising that an individual midwife is not indispensable to a woman.

Midwives in this study consistently identified that the joy and passion for midwifery primarily sustains them in LMC practice. Midwives spoke enthusiastically about the joy of being involved in such a special part of women's lives. Participants identify that their joy and passion for midwifery is sustained by the unique model of midwifery care in New Zealand which facilitates reciprocity through the philosophy of partnership; a woman-midwife relationship that is based on mutual equality and trust, keeps the woman as the focus and in which midwifery care is negotiated (Guilliland & Pairman, 1994). Participants expressed that midwifery is 'more than a job'; a midwife is someone they become; and a way of life. The participants state that the satisfaction they have in working in partnership with women and their whānau/family engenders their joy and passion in midwifery practice.

## WORKING IN PARTNERSHIP WITH WOMEN AND THEIR WHANAU/FAMILIES SUSTAINS THE 'JOY OF MIDWIFERY PRACTICE'

Midwives in this research identified the primary factor that sustains them is the joy experienced in the reciprocal relationship formed when LMC midwives work in partnership with women and their families/whanau.

For Sheila the rewarding part of midwifery practice is supporting women to birth in the way that they aspire to:

> *It's about supporting women to do something empowering for themselves like being alongside them to do something that they've aspired to do and generally that's along the lines of giving birth without drugs, that's what I feel really passionate about.*

Reciprocal relationships between women and midwives appear to affect and influence the atmosphere at a birth (Berg, Ólafsdóttir, & Lundgren, 2012). Berg et al. defined this reciprocity as presence, affirmation, availability and participation. Parratt (2010) reports that good relationships with midwives can empower women to access their own intrinsic power in unanticipated ways. The 'love of midwifery', the vocation of midwifery, and midwifery being who one is rather than a job one does were also identified as a markers of resilience (Hunter & Warren, 2013). This same sentiment and passion is what LMC midwives in this research identified as sustaining them in practice.

Midwives expressed that it is working alongside women and their whānau/families in a community and the relationships they forge, which sustain their joy in LMC midwifery practice. Barbara speaks about the satisfaction she gains from caring for eleven women from one family:

> *I'll tell you another thing, there's a family here, who I looked after now, a Māori family, I think it's 11 women I've looked after having babies now, last year, the granddad came out and he's a pretty old man, ...I saw him in the hospital corridor, and he came out and gave me a kiss and said, 'thank you for what you've done for my family.' And that was really*

Midwives in this study consistently identified that the joy and passion for midwifery primarily sustains them in LMC practice.

*special. And that's another thing, you think of those things and you think, 'that's why I do this...'*

Providing continuity of midwifery care for a family gives Barbara satisfaction. The special moment of being appreciated by the grandfather gives her a sense of doing something worthwhile for the family and the community.

Karen also felt that she gains a lot from her relationships with women in her practice:

*Women turn up at my practice and I've thought, 'well, this is why I'm here.' They've given me so much back. So that's been so rewarding and that's what you do it for is the clients.*

For Karen, the woman-midwife partnership is rewarding for her personally, she says that clients have given her so much back, and this sustains her in practice. This echoes McCourt and Stevens' (2009) findings that reciprocity added to job satisfaction and less stress in midwifery. A study of community midwives in the UK found that midwives became emotionally fatigued when relationships were not reciprocal and fulfilling (Deery, 2009; Deery & Hunter, 2010).

The sense of specialness in midwifery, the magic of mother and baby meeting at the birth and the initial home visit are moments that help sustain Barbara in her practice:

*I mean the thing that keeps me in midwifery is the first time a mother looks at her baby....I think of that moment....that's what keeps me in midwifery... and also the second point for me is the first time you visit a family at home, the baby's at home...Those two things are what keeps me in midwifery.*

Barbara also speaks about a broader role in society in the following data. For her, midwifery extends to building good communities, and this is an inspiring aspect of midwifery that sustains her:

*I really wanted to provide continuity to women, the actual concept of doing LMC work, I love it. I guess my thing is that I really believe that how a woman feels about her birth really affects how she parents her child. And so while I totally support physiological birth and I guarantee to do my best to allow a woman to have that, I still believe that it's still not so much about how she births it's about how she feels about it. I still absolutely believe that. And I totally support physiological birth you know, absolutely, it's about parenting afterwards, and we are there for such a short time... and her role... she must parent that baby well. Yeah. I mean for the whole society, I think it has absolute ramifications for society.*

For Barbara working in partnership with the woman and her family is about ensuring the woman is prepared to parent her new baby well. Barbara sees a connection between her role as a midwife and society. Barbara's commitment to this sense of interconnectedness is congruent with the knowledge we have about attachment and interpersonal neurobiology (Siegel, 2001). Hunter and Warren (2013) also found in their resilience research that underlying the love of midwifery for many midwives is a fundamental commitment to making a difference at an individual, community and societal level. 'Contributing to the greater good' was a common theme in their study (Hunter & Warren 2013). It would appear that resilience and sustainability are in part, for some midwives, associated with a greater good.

For a number of the participants an important part of the reciprocity of the partnership is about negotiating boundaries with the women. Psu says it is important that the women are well informed about how the practice operates, when the midwives' weekends off are and who will care for the women so that is clear, and there are no surprises:

*As long as you tell the women when you book them, "this is how I work… these are my boundaries. This is when I work. If I have a weekend off and you birth, actually my partner is going to be with you." And they're fine. If you spring it on them a week before-hand they're not, but we try, both of us to tell all our women that, this is how we work.*

In Psu's practice the midwife works in partnership with the woman from the first meeting to establish a relationship which will help to sustain the midwife. Women are provided with written information about how the practice operates regarding time off, and within that booklet are the ways that midwives prefer to be contacted. The setting of boundaries for this practice and being very clear with women about how, when and why to contact the midwife places a boundary which protects the midwife's time but also keeps the partnership between the woman and her midwife safe.

## DISCUSSION

The joy experienced in reciprocal partnership relationship with women and their whānau, including the negotiation of boundaries, underpins resilience and sustainability in midwifery practice.

Midwives in our research identified the primary factor that sustains them is the joy experienced in the reciprocal relationship formed when LMC midwives work in partnership with a women and her family/whānau. The findings of this research reflect those of other studies (Doherty, 2010; Kirkham, 2011; Leap et al., 2011) which also identified that first and foremost it is the joy and the satisfaction of working with women that sustains midwives in their practice.

The decision to explore the theme 'working in partnership sustains the joy of practice' in this first paper, was because it was overwhelmingly present in the data. However, the 'joy of midwifery' alone does not sustain the midwives in LMC practice. The midwives in this research spoke at length about what is required for them to sustain this joy. The findings of this study highlight a seemingly paradoxical message. Although midwives are inspired and sustained by partnership and reciprocal relationships, they also need to negotiate boundaries and ensure their professional and personal lives are integrated and balanced.

Although midwives are inspired and sustained by partnership and reciprocal relationships, they also need to negotiate boundaries and ensure their professional and personal lives are integrated and balanced.

## CONCLUSION

Returning to the question this study asks: What sustains midwives in LMC practice? The findings show that the primary factor that sustains them is the joy experienced in the reciprocal relationship formed when LMC midwives work in partnership with women and their families/whanau. The joy of midwifery practice is reflected in a passion for 'being with' women and families, supporting and empowering them through their childbirth experiences and to have the birth they aspire to. The joy underpins the sustainability of midwives in LMC practice. Midwives

and women need to ensure that the unique model of midwifery care in New Zealand based on partnership and reciprocity continues to define the maternity service in New Zealand.

As noted earlier, this paper is one of a series exploring sustainable LMC midwifery practice. The papers that follow will explore other findings from the research in regard to the practical and practice matters that sustain the joy of midwifery, such as supportive relationships, philosophically aligned midwifery partnerships, sustainable practice arrangements and the realisation that individual midwives are not indispensable. The health and wellbeing of midwives is integral to sustaining LMC midwifery care for the next generation of New Zealand women and midwives.

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