



NEW ZEALAND
COLLEGE OF
MIDWIVES (INC)

JOURNAL

Practice Issue

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is it necessary for
healthy pregnancy?

Sandra Elias

New Zealand Research

Staying or leaving:
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midwives, exploring
the sustainability of practice
as Lead Maternity Carers
in one urban region
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Surfing the Net

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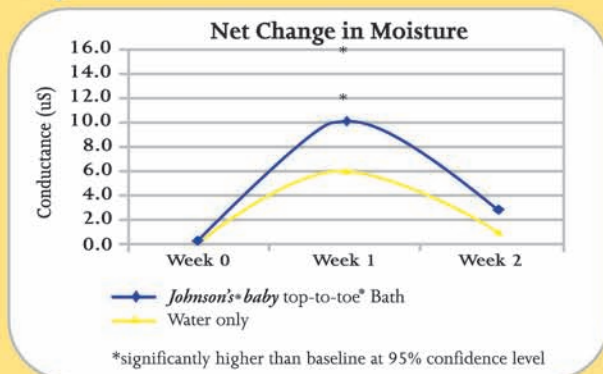
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Philosophy of the Journal

Promote women's health issues
as they relate to childbearing women
and their families.

Promote the view of childbirth
as a normal life event for the majority
of women, and the midwifery profession's
role in effecting this.

Provoke discussion of midwifery issues.

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EDITORIAL

This issue of the Journal marks the end of the stewardship of the Journal by the Dunedin 'Five'. Since May 2001 the Journal has been cared for by an Otago-based Editorial Board: Alison Stewart, Sally Pairman, Deb Davis, Jean Patterson and myself. The original editors of the Journal were Judy Hedwig and Helen Manoharan of Palmerston North. They published the first issue in September 1989! Then there was a period of an Editorial Collective based in Palmerston North. Following that Helen took responsibility as editor (from Issue 10) with the help of an Editorial Advisory Committee. From Issue 22 until Issue 24 (April 2001), Wellington midwife, Dr Gillian White, was editor. She was supported by a larger, country-wide Editorial Board, which had included Sally and Alison.

The Dunedin Editorial Board disbanded in December 2006 to take on new professional activities. I took up a contract as interim editor until the NZCOM National Committee appointed the next Editor. **Dr Joan Skinner** who will be the academic Editor will receive secretarial and sub-editing support from National Office, primarily from Practice and Education Advisor, **Lesley Dixon**.

Contributors to the Journal from now on should submit their work in hard copy to: Lesley Dixon, Box 21-106, Edgware, Christchurch 8143, New Zealand OR electronically to: joan.skinner@vuw.ac.nz (see amended 'guidelines for contributors', page 38 of this Issue). Any further amendments required by this changing of the *kai tiaki* of the Journal will be added to the 'Journal guidelines for contributors' in the next issue, and posted on the website.

Before introducing Joan in the following biography, I would like to take this opportunity to thank all the members of the previous Editorial Board, Alison, Karen, and Lesley for their patient support this last year. I would like also to thank all our generous, skilled reviewers, and - finally - the authors who work so hard to sculpt and re-sculpt their words. We should be so proud of the growing number of midwife writers and researchers.

I sincerely wish Joan and Lesley all the very best for future issues.
Rhondra Davies.

Joan has been a midwife in New Zealand since 1977. She trained at St Helens Hospital in Wellington and went on to work there, and then at Wellington Women's Hospital. For 2 years she was a Charge Midwife in the Delivery Unit. In 1987 she moved to Auckland and began work as a home birth midwife on the North Shore. On returning to Wellington in 1992 she worked as the Perinatal Unit Manager at the Hutt Hospital, and then returned to home birth practice. She has also worked as a midwife for the Hutt Union and Community Health Service, a primary health service focused on caring for low income families in the Hutt Valley.

In 1999 she moved into academia where she is now a senior lecturer in the Graduate school of Nursing, Midwifery and Health, at Victoria University of Wellington, working primarily with midwives undertaking postgraduate studies, from Postgraduate Certificates to PhDs. Joan herself gained a PhD in 2005. Her research interests are in 3 areas. The first relates to how risk is expressed in maternity care, in particular the collaborative interface between primary and secondary maternity care. The second relates to the protection of normal birth, focusing on community engaged activities and the utilisation of primary birthing units. She also has an interest in the support of midwifery in developing countries and in the last couple of years has undertaken midwifery consultancies in Cambodia, Afghanistan and Kiribati.

Joan continues to practise as a midwife and has provided locum cover and a mentoring service. Currently she works as a casual midwife at the Kenepuru primary birth unit in Porirua.

Joan has had a long involvement with the NZCOM and was a founding member. She was actively involved in the political activity leading to the 1990 change in the Nurses Act and has represented the NZCOM in many forums. She provides expert advice to ACC, HDC and the courts and is a member of the Professional Conduct Committee of the New Zealand Midwifery Council.

LETTER TO THE EDITOR

15th May 2007

Dear Editor,

It was with a feeling of 'oh no!' that I found an article written by Julie Payne and myself in the April Journal had my name first. I understand now, after correspondence with Rhondra (interim Journal Editor), that this order had been consistently Payne then Smythe in all drafts, but an inadvertent swap in the order went unnoticed in the final proof reading. That mistake – now irretrievably in print – however caused me still to want to write to the Journal and raise the question of what matters about authorship. When I completed my own PhD several years ago I sent away articles in my name alone, acknowledging my supervisors but not affording them the recognition owed to them of the investment they had made to help me complete the research. Looking back I am aware that it was at a time when there were few role models to follow. It felt like I had written the paper, and using a methodology that speaks in the first person it was difficult to write in a more inclusive style. The rise of PBRF (Performance Based Research Fund) drew authorship into the spotlight. Supervisors needed to have their name included on their students work to have the output recognised as belonging to the University. As a supervisor I began to have conversations with students about needing to be more closely involved in publications that arose from their work. Other disciplines had been doing that for many years but it felt like a culture shift for midwifery. Now I find myself named as first author in a study that was very much Julie's own work. It was my privilege to accompany her journey of listening to the experiences of teenage mothers and offer my scholarly expertise, but it is her study, and her passion. She is the person who needs to be consulted on issues related to teen pregnancy. I write this letter recognising that mistakes happen, accepting the apology, and the Editor's effort to put that right. I also wish to signal that we are in an era where supervisors need to be co-authors for, unless we join the publication scramble, midwifery is going to be seen as a poor relation in the point scoring PBRF round that provides evidence of research activity. Like it or not, we need to have all research done by midwives 'counted'. Nevertheless, let us always honour the students who invest so much of themselves into the research by putting their names first, unless an unusual situation deems otherwise.*

Yours sincerely

Liz Smythe

Associate Professor

Auckland University of Technology.

* See apology printed on page 10 in this issue.
R.Davies, interim Editor.

Iron supplementation – is it necessary for healthy pregnancy?

Sandra Elias MSc

Sandra Elias is a Senior Lecturer in the School of Midwifery, Otago Polytechnic in Dunedin. She completed an MSc in the area of Maternal Nutrition from the University of British Columbia, Canada.

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Abstract

Iron is an important mineral during pregnancy for both mother and fetus. Although the food supply provides numerous sources of iron, many women of child-bearing age in New Zealand consume intakes below what is recommended. The beneficial effects of iron supplementation in pregnancy on birth outcomes are controversial however maternal benefits have been clearly identified. The recommended dose for iron supplementation in pregnancy is generally accepted to be between 30-100 mg/day. Even when the women is aware of the importance of obtaining adequate dietary iron and are encouraged by midwives to follow healthy eating practices, iron supplementation may be indicated in some situations. Midwives should therefore assess women based on their iron status and history and provide appropriate advice regarding diet and supplementation to support healthy pregnancy.

Introduction

Iron deficiency is the number one micronutrient deficiency worldwide with estimates of over two billion people affected. Iron deficiency is more common in women than men and its prevalence increases during pregnancy (Stoltzfus, 2001). Iron deficiency or iron depletion occurs when levels of stored iron in the body (ferritin) fall below normal levels (Table 1). As ferritin levels fall, the amount of iron transported in the blood also decreases resulting in a reduction in the amount of iron transported in the blood (transferrin saturation) and eventually a reduction in functional iron (haemoglobin). The reduction in haemoglobin indicates the presence of iron deficiency anaemia. Prophylactic iron supplementation during pregnancy is recommended in some countries (Danish National Board of Health, 1992; American College of Obstetricians and Gynecologists, 1993). In New Zealand routine iron supplementation for pregnancy is not recommended, instead supplementation is based on individual need. The following article provides an overview of iron in pregnancy and explores strategies for attaining

adequate iron status focusing on iron supplementation for at-risk groups.

The role of iron in pregnancy

Maternal effects

Iron is a component of haemoglobin, which is required during pregnancy to supply maternal and fetal tissues with oxygen. In pregnancy additional haemoglobin is required for the increase in maternal red cell mass and to allow for normal blood losses at delivery. An insufficient haemoglobin concentration may cause fatigue, reduced immune function, deficits in concentration and mood, and impaired work performance (Bodnar, Cogswell & McDonald, 2005). Further, a reduction in haemoglobin during pregnancy has been associated with increased risk for post-partum haemorrhage and overall maternal morbidity (Allen & Casterline-Sabel, 2000).

Fetal and infant effects

Low maternal haemoglobin has been associated with an increased risk of pre-term birth, low birth weight and perinatal mortality particularly in developing countries where rates of anaemia are high and other factors such as general hygiene and nutrition are sub-optimal (Rasmussen, 2001; Yip, 2000). Infants born to iron-deficient or anaemic mothers are at greater risk of being iron-deficient or anaemic (Haram, Nilsen & Ulvik, 2001). However, in a group of New Zealand infants this relationship was not evident (Emery & Barry, 2004). Iron-deficiency and iron-deficiency anaemia in infancy has also been linked to poor cognition and reduced immunity (Booth & Aukett, 1997).

Assessment of iron status

There is controversy with respect to the appropriate cut-off values for defining iron deficiency and iron-deficiency anaemia particularly for pregnancy. The World Health Organisation defines anaemia as haemoglobin levels below 110 g/L in the first and third trimester and below 105 g/L in second trimester. Milman, Bergholt, Eriksen, Byg, Graudal, Pedersen & Hertz (2005) suggest similar cut-offs but also include that ferritin levels below 12 micrograms/L is indicative of iron-deficiency anaemia.

The Australian Iron Advisory Panel (no date [n.d.]) recommends using haemoglobin and ferritin along with a variety of risk factors including a history of iron deficiency, post-partum haemorrhage, recent blood donation, poor socioeconomic status and heavy menses, to assess a woman's risk of iron deficiency and iron deficiency anaemia in pregnancy. They suggest that woman in the first trimester of pregnancy with haemoglobin levels between 105-115 g/L and one or more risk factors are at risk of developing iron deficiency in pregnancy whereas women with haemoglobin less than 105 g/L are considered anaemic.

Iron recommendations for pregnancy

The New Zealand recommendation for iron intake during pregnancy is 27 mg/day for both adolescents (14-18 years) and women (>18 years) (Australian Government National Health and Medical Research Council, 2005). Little is known about the iron intake and iron status of pregnant New Zealand women. However according to the 1997 National Nutrition Survey, non-pregnant women aged 25-44 had mean iron intakes of only 10.5 mg/day (Russell, Parnell & Wilson, 1999). Although women in this survey had low intakes of iron, the prevalence of iron deficiency anaemia in this population was low (2%). There is no evidence to suggest that dietary intakes of pregnant women are significantly different than non-pregnant women therefore it is likely that pregnant New Zealand women also have low intakes of dietary iron, well below the recommendations. Iron absorption, however is enhanced in pregnancy; the mechanism by which this occurs is not known (Fairbanks, 1999). Despite enhanced iron absorption in pregnancy, women with low dietary iron intakes prior to and during pregnancy, are at increased risk for iron deficiency or iron deficiency anaemia in pregnancy.

How to ensure adequate iron status

Diet

Iron has many oxidation states, however only the ferric and ferrous states exist in food. When describing the iron present in food the terms haem and non-haem are used. Both haem and non-haem

Table 1. Parameters of iron status used in iron assessment			
Iron status	Stored iron (ferritin)	Transport iron (transferrin)	Functional iron (haemoglobin)
Iron-deficiency anaemia	Low	Low	Low
Iron depletion	Low	Normal	Normal
Normal iron status	Normal	Normal	Normal
Iron overload	High	High	Normal

Iron supplementation – is it necessary for healthy pregnancy?

iron are present in animal products, whereas plant sources such as whole grains, nuts, beans and legumes contain only non-haem iron. Haem iron is present as ferrous iron, bound within haemoglobin and myoglobin in animal flesh. Non-haem iron is found in foods as ferric and ferrous iron (Groff & Gropper, 2000). Some foods in New Zealand are also fortified with non-haem iron including breakfast cereals, sweet biscuits and some milks.

Only a small proportion of dietary iron is absorbed in the gut and therefore, not all dietary iron consumed is available for use by the body. This is referred to as the bioavailability of iron. Haem iron is readily absorbed by the body whereas non-haem iron is less soluble in the gut and therefore less is absorbed. Up to one-third of haem iron and 2-20% of non-haem iron is considered bioavailable (Hurrell, 1997). To enhance the bioavailability of non-haem iron the following strategies can be employed:

- Consumption of vitamin C rich food with meals or snacks containing iron (examples of vitamin C rich foods include tomatoes, capsicums, strawberries). Vitamin C increases the bioavailability of iron by forming a chelate with iron converting ferric iron into ferrous iron, a more soluble and absorbable form of iron (Cook, 2001).
- Consuming small portions of meat, poultry and fish with foods containing non-haem iron (examples might include bean chilli with small portions of mince beef, vegetable and nut stir-fry with small quantities of chicken, beef or pork). Certain amino acids present in high concentrations in animal flesh enable the conversion of ferric iron to the ferrous form (Hurrell, 1997).
- Consuming black types of tea (oolong, Ceylon) one to two hours before or after a meal rather than with a meal. Tannins, polyphenolic compounds present in tea, bind to iron in the gut thereby inhibiting the absorption of iron (ibid).

Furthermore, zinc and calcium can interfere with iron absorption thereby reducing iron bioavailability. Zinc, calcium and iron compete for absorption into the intestinal mucosa; however this interaction appears to occur only when these minerals are given in high doses such as those found in supplements. Calcium and zinc present within food do not appear to have similar inhibitory effects on iron absorption (Minihane & Fairweather-Tait, 1998; Groff & Gropper, 2000).

Supplements

In addition to food, iron supplements can also be used to meet dietary iron requirements. There are many types of iron supplements available in

New Zealand (Table 2). Iron supplements come as either tablets or liquid, and are available in various doses ranging from tonics with negligible amounts (<10mg), to low-dose (20-60mg), slow-release and high-dose (>60mg). Iron supplements contain ferrous iron and are combined with other compounds such as fumarate, gluconate, lactate or sulphate to increase its stability. The term 'elemental iron' is used to indicate the amount of iron present within these compounds, and therefore represents the amount of iron available for absorption.

mal increases in iron status, compared to those supplemented daily with 50 mg elemental iron (Heath, Skeaff, O'Brien, Williams & Gibson, 2001). Therefore in some situations, particularly in at-risk groups as described, iron supplementation is warranted.

Low-dose iron supplementation in pregnant women with haemoglobin levels of 110-120 g/L has been found to be effective in preventing iron deficiency and iron-deficiency anaemia. Supplementation with 20 mg elemental iron/day

Strategies to ensure optimal iron status for pregnancy

- Consume iron rich foods on a daily basis
- Increase the bioavailability of iron in foods by
 - Consuming foods rich in vitamin C
 - Consuming small portions of meat, poultry and fish with foods containing non-haem iron
 - Avoiding black types of tea (oolong, Ceylon) with meals
- Consider the use of iron supplements (40-60 mg elemental iron/day) for women with poor iron status and take at separate times of day than calcium or zinc supplements.

The need for iron supplementation is greatest for women who enter pregnancy with poor iron status. Poor iron status may be attributed to a variety of factors including a poor diet with low intake of iron-rich foods, history of iron-deficiency or iron-deficiency anaemia, recent pregnancy, previous post-partum haemorrhage and low socio-economic status (Australian Iron Advisory Panel, n.d.). In addition, women with high menstrual loss are also at risk for iron deficiency and iron deficiency anaemia (Lynch, 2000).

Adolescents, who often have sub-optimal intakes of iron and low blood ferritin concentrations, are also at increased risk for developing iron-deficiency anaemia in pregnancy (ibid). Non-pregnant New Zealand adolescents aged 15-18 years, have iron intakes of 10.4 mg/day (Russell et al, 1999) well below the recommended intakes of 15 mg/day (Australian Government National Health and Medical Research Council, 2005).

Although dietary strategies should be encouraged to improve iron status, increasing dietary iron intake alone does not always result in increased haematological values in the short term. A study of non-pregnant New Zealand women with mild iron deficiency who had made significant dietary changes over four months achieved mini-

from 20 weeks gestation until delivery prevented iron deficiency and iron-deficiency anaemia in a group of Australian women (Makrides, Crowther, Gibson, Gibson & Skeaff, 2003). Milman et al (2005) also found that daily supplementation of 40 mg elemental iron early in pregnancy (18 weeks gestation) was as effective as 60 or 80 mg elemental iron/day in preventing iron deficiency and iron deficiency anaemia in women with an initial mean haemoglobin of 117 g/L. Similarly, daily supplementation of 50 mg elemental iron from 21-26 weeks gestation for three months resulted in a mean rise in haemoglobin, from 112 g/L to 123 g/L (Ekstrom, Kavishe, Habicht, Frongillo, Rasmussen & Hemed, 1996). Cogswell, Parvanta, Ickes, Yip & Brittenham (2003) however, found that daily

supplementation of 30 mg elemental iron from 10 weeks gestation until 28 weeks gestation did not result in a lower prevalence of iron-deficiency anaemia compared to placebo in a group of iron replete, non-anaemic women. It is possible however, that if supplementation continued throughout pregnancy a lower prevalence of iron-deficiency anaemia may have been found. These studies demonstrate that low-dose iron supplementation (<60 mg/day) can help prevent iron deficiency anaemia in women with haemoglobin values at the lower end of normal when given from approximately 20 weeks gestation until birth.

It is important for pregnant women to maintain healthy iron levels for both themselves and their offspring. It is essential therefore, that iron status be monitored throughout pregnancy, and that midwives provide necessary recommendations regarding diet and supplementation.

Although low-dose iron supplementation can be effective in preventing iron-deficiency and iron-deficiency anaemia, higher levels are necessary for treatment. A meta-analysis of data from randomized controlled trials between 1966 and 1998 found that >90 mg iron/day was needed to improve haematological indices in pregnant, anaemic women (Sloan, Jordan & Winikoff, 2002).

Some of the issues regarding iron supplementation are tolerance and compliance. Gastro-intestinal side effects such as nausea, vomiting, epigastric pain and constipation are associated with iron supplementation. However, the results of many studies, including a large (n=427) randomised controlled trial, found that gastro-intestinal side effects associated with iron supplementation did not differ between women supplemented daily with 20, 40, 60 or 80 mg elemental iron in the form of ferrous fumarate (Milman, Byg, Bergholt & Erikson, 2006). Higher doses of elemental iron (>100 mg) however, have been reported to increase side effects and therefore are associated with lower compliance than lower doses (Ekstrom et al, 1996). There is limited evidence to support the use of one type of iron supplement over another due to tolerance; however larger doses irrespective of type tend to be less tolerable than low dose supplements.

When using supplements, toxicity issues should always be addressed. With iron however, toxicity is generally not a concern as the body regulates iron absorption based on stored levels (ferritin). Therefore individuals with poor stores have a greater absorptive ability than those with normal stores. There are some women for whom iron supplementation is contraindicated. Women with the condition haemochromatosis, a condition most common in individuals of Northern European descent, have an enhanced ability to absorb and store iron in the body. The increase in body iron, if not treated, results in iron overload and leads to tissue damage, specifically in the liver and heart (Groff & Gropper, 2000).

Conclusion

Despite the controversy surrounding the benefits of iron supplementation for birth outcome, benefits to maternal haematological values and general well-being are well established. It is important for pregnant women to maintain healthy iron levels for both themselves and their offspring. It is essential therefore, that iron status be monitored throughout pregnancy, and that midwives provide necessary recommendations regarding diet and supplementation. Even when supplementation is warranted, strategies to increase a woman's dietary iron intake are paramount for developing good eat-

Table 2. Iron supplements available in New Zealand				
Supplement name	Preparation	Daily Dose	Amount of elemental iron per daily dose (mg)	Subsidised by Pharmac
Bayer Elevit	ferrous fumarate	1 tablet	60	No
Blackmores Pregnancy and Breastfeeding	ferrous fumarate	2 tablets	5	No
Ferrit Ferroforce	ferrous lactate	15 ml	15	No
Abbott Ferro-gradumet	ferrous sulphate	1 tablet	105	Part subsidy
Abbott Ferrograd-folic	ferrous sulphate	1 tablet	105	Part subsidy
Healthieries Iron with Vitamin C	ferrous gluconate	1 tablet	20	Yes
Healthieries Iron Fizz with Vitamin C	iron oxide	2 tablets	12	No
Red Seal Floravital tonic	ferrous gluconate	20 mls	19	No
Solgar Gentle Iron	iron bisglycinate (chelated iron)	1 tablet	25	No
Solgar Prenatal Nutrients	iron bisglycinate (chelated iron)	4 tablets	27	No
Thompsons Liquid Iron	ferrous gluconate	10 mls	20	No
Thompsons Organic Iron Complete	ferrous fumarate	1 tablet	24	No
Thompsons Pregnacare	ferrous fumarate	2 tablets	10	No

ing habits that will continue throughout pregnancy and beyond.

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ERRATUM

The Journal sincerely regrets listing the authors of 'YOUNG AND PREGNANT' in issue number 36, April 2007, in the order of Liz Smythe and then Julie Payne.

The Editor would like to advise readers that Julie Payne was the primary author of this article, and as such, her name should have appeared first. I regret that the swapping of the two names was not detected in the final proof reading.

Rhondra Davies, interim Editor.

NEW ZEALAND RESEARCH

Staying or leaving: A telephone survey of midwives, exploring the sustainability of practice as Lead Maternity Carers in one urban region of New Zealand

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Abstract

The sustainability of Lead Maternity Carer (LMC) midwifery practice is an issue of growing concern. In one urban region of New Zealand there appeared to be a large number of LMC midwives indicating that their way of working was unsustainable, resulting in fewer midwives being available to provide primary maternity care. A structured telephone survey of 94 practising and non-practising LMC midwives from this region was undertaken to identify reasons that support midwives to continue practising as LMC midwives and also to identify reasons why midwives leave practice. Continuity of care and the quality of the relationships that are developed with women were the main reasons that supported and sustained LMC midwives in practice. Paradoxically these reasons also caused midwives to leave. Seventy eight percent of the midwives surveyed stayed on-call for births, an indication of the lack of home/work balance that they were able to attain. Midwives need to develop work practices that acknowledge the rewards of continuity, while at the same time provide the space for rest, for family, and for friends.

Introduction

There is growing concern internationally about the shortage of midwives (World Health Organisation, 2006). This shortage is also becoming apparent in

some areas of New Zealand (Hendry, 2005; Ministry of Health, 2006). Given that 80% of New Zealand women who currently give birth rely on care from Lead Maternity Care (LMC) midwives (Guilliland, 2006), and that it is expected that all New Zealand women have a midwife at their births, it is important to investigate the reasons for this shortage in order to ensure women's continued access to midwifery care. Identifying the causes of midwifery shortage will enable appropriate and effective action to be taken.

Two qualitative studies undertaken in New Zealand by Engel (2000) and McLardy (2003) identified sustainability of LMC practice as one aspect, which could be contributing to the decline in the midwifery workforce. Both researchers commented that the midwives in their studies were beginning to become overwhelmed by the need to provide continuity of carer. The findings identified the necessity for midwives to find a balance between the demands of their job and the need for a satisfying personal life. Job satisfaction for these midwives was associated with developing meaningful relationships with the women over the time in which they provided care. Midwives in these studies however, identified difficulties associated with being on continuous call. Living

This survey gives an indication that there need to be changes to the way LMC midwifery is practised and that there is some urgency in attending to this. Midwives clearly need more time off with better funding structures to support this.

on-call interfered with family and social life and left little time for complete rest from work. McLardy (2003) found that the midwives in her study tended to feel socially isolated and had difficulty setting clear boundaries with their clients. Midwives showed signs of burnout when they were unable to keep a balance

between their home and work life. Engel (2000) also added that the model of funding also contributed to the midwives feeling overwhelmed. They were inclined to stay on-call, not only because they felt that it was expected but also because if they missed a birth, they lost income.

While these two studies were both small in scale, including a total number of 11 midwives, they supplied in-depth knowledge around the issue of sustainability of LMC practice in New Zealand and indicated there may be a problem. Continuity

of carer seemed to be leading to burnout and to midwives not being able to stay in independent practice. This finding was of concern and has also been reported as in the international literature (Sandall, Davies & Warwick, 2001; Ball, Curtis & Kirkham, 2002). Further research needed to be undertaken in the New Zealand context to establish the extent of this problem. The research that this paper reports, a telephone survey of LMC midwives in one large urban area of New Zealand, was undertaken to establish and to quantify the extent of this problem.

Research design

The aim of this research was to explore the sustainability of LMC midwifery practice within one urban region of New Zealand. The objectives were to identify the reasons why midwives leave LMC midwifery practice and, for those midwives who choose to stay, to identify what supports them to stay in practice. A survey was the chosen method, as it enabled quantification of issues related to sustainability. A telephone survey as opposed to a postal survey was undertaken as it was anticipated that it would improve the response rate, given that we have been conditioned within society to answer the telephone when it rings (Frey, 1983) and midwives rely on their telephone for contact with their clients. It would also enable the researcher to obtain clarification of the open-ended questions. It was important that both midwives who had left LMC practice and those who were still in practice were included, as it was of value to find out not only what leads to LMC midwifery becoming unsustainable but also what supports it to be sustainable. Ninety-four LMC midwives with current access agreements to the facilities of one large urban District Health Board in New Zealand were contacted. None of the 94 midwives declined to participate, resulting in a 100% response rate.

The survey was designed to take 15 minutes to complete over the telephone. It contained a series of closed and open-ended questions and Likert scaled attitudinal ratings related to practice patterns, including caseload, team structure, time off and financial organisation. The midwives still in practice were asked what they valued about their work, what they found difficult and what they found supported them in practice. They were asked how long they thought they would stay in LMC practice. Those who had left or were about to leave were also asked what they valued, what they found difficult and what they found supportive. In addition they were asked why they had left, whether they would consider returning and what would need to change in order for them to return. A pre-test of the survey was carried out

with LMC midwives from a neighbouring region to determine clarity and the time the survey took to complete. Data collection occurred over an eight-week period from the 4th January to 28th February 2006. Data were entered into a computer using SPSS and analysed using descriptive statistical analysis (Hicks, 1998). Comments made by the midwives in response to the open ended questions were collated and used to assist in the interpretation of the quantitative data. The research had ethical approval from the Victoria University of Wellington Human Ethics Committee.

Results

The demographic characteristics obtained in the survey revealed that the average age of the participant midwives was 46 years, which is consistent with the average age and range of midwives nationally (New Zealand Health Information Service, 2005). On average, midwives had been in practice for 14 years (range was from six months to 38 years) and in LMC practice for 7 years (range was from five months to 24.5 years). (There were four midwives who have been practising in what they considered LMC practice capacity prior to the passing of the Nurses Amendment Act in 1990).

The midwives in this study carried a caseload size, which ranged from one woman per year through to 110 women per year. Seventeen percent of midwives carried a caseload size of between 1-25 women, 43% of midwives carried a caseload size of between 26 – 50 women, 33% of midwives carried a caseload size of between 51-75 women and seven percent of midwives carried a caseload of between 76-110 women.

Table 1: Number of midwives who had structured time off / no time off

Category	Number	% of total surveyed
Structured time off	66	70
No structured time off	28	30
Structured time off but on-call for births	45	48
Structured time off, not on-call for births	21	22
Continuously on-call for births	73	78

The midwives in this study valued the ability to choose the size of their caseload and their hours of work. Collegial support was important to them and this was evidenced by the number of regular group meetings and by the provision of back up support when they were tired or having time off. Despite this, structured time off was not as it appeared, as nearly half of the midwives who said they had structured time off still remained on-call for births. Only 22% of the midwives in

the study actually had real time off on a regular basis (Table 1).

The majority of midwives (80%) preferred to work in a group practice, which provided support and back up. Ninety two percent of midwives were on call and working for 24 hours before they would

Table 2: Hours worked before back up is called

Hours worked	Frequency
12	4
16	1
18	2
24	86
Missing	1
Total	94

call a back up midwife for support (Table 2). They all stated they may not necessarily leave a woman at this stage if the birth was imminent, but would call back up to ensure safety for the woman and themselves. Eighteen percent of the midwives indicated they worked as sole practitioners and most of these midwives had no formal back up arrangements. If they needed to be relieved they would ‘ring around’ their colleagues with whom they had a loose association, for assistance, or they would just have to “carry on”. Of the 94 midwives in the study, only four did not work a 24-hour on-call system. These four midwives worked a rostered, 12-hour system between the hours of 8am-8pm or 8pm-8am.

Midwives were asked, from a list of options, to indicate their reasons for choosing to practice as an LMC midwife. Continuity of care was the most common reason given by 68% of midwives, followed by relationships with women (55%) and the ability or freedom to choose their own hours (48%).

Midwives were asked to rate on a scale from one to ten, with one being no problem and ten being a

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Staying or leaving: A telephone survey of midwives, exploring the sustainability of practice as Lead Maternity Carers in one urban region of New Zealand

Table 3: How the midwives rated the difficulties with LMC practice

	Family social life	24/7 on-call	Money	Increasing institutional demands	Unplanned time off	Lack of sleep	Community perceptions
Mode	10	10	8	8	8	5	5

large problem, the difficulties they had with LMC practice. The mode score has been used to show the most frequently occurring score. Interference with family and social life and being continuously on-call were two of the biggest problems midwives had with LMC practice. In other words the most frequently occurring score chosen by the 94, for the difficulty designated ‘Family Social Life’, was the highest, a 10. Likewise the most frequently chosen score for ‘24/7 on-call’ was ten. Whereas the most commonly chosen score for ‘lack of sleep’ was a 5, revealing that that consequence of LMC practice was rated by a significant proportion of the 94, as being a problem in the middle range difficulty compared to the other difficulties presented (Table 3).

Seventy of the midwives who responded to the survey were currently in practice and the remaining 24 had left practice or were about to leave. Twelve of the midwives who had left or were about to leave thought they would eventually return. Twelve were not planning to return to LMC midwifery at all. Midwives who were currently in LMC practice (n=70) and those who had left but were planning to return to LMC practice (n=12) were asked what would continue to support them in their practice (Figure 1). Those who had left but were not considering returning were asked what would need to change before they would consider returning (Figure 2). Reasons which would support midwives to continue staying in practice focused mainly on having regular paid time off. For those not considering returning, funding issues were the main consideration.

Thirty percent of midwives currently in LMC practice were planning to leave within the next two years (Table 4).

Twenty-nine midwives were no longer in LMC practice. (Included in this were the five midwives who were about to leave within a few weeks). The main reasons given for leaving were exhaustion (66%), no time for self (41%) and medico-legal anxiety (28%). The midwives were then asked if they would consider returning to practice. Seventeen (58%) of the 29 midwives who had left practice indicated they would not be returning to LMC practice.

Discussion

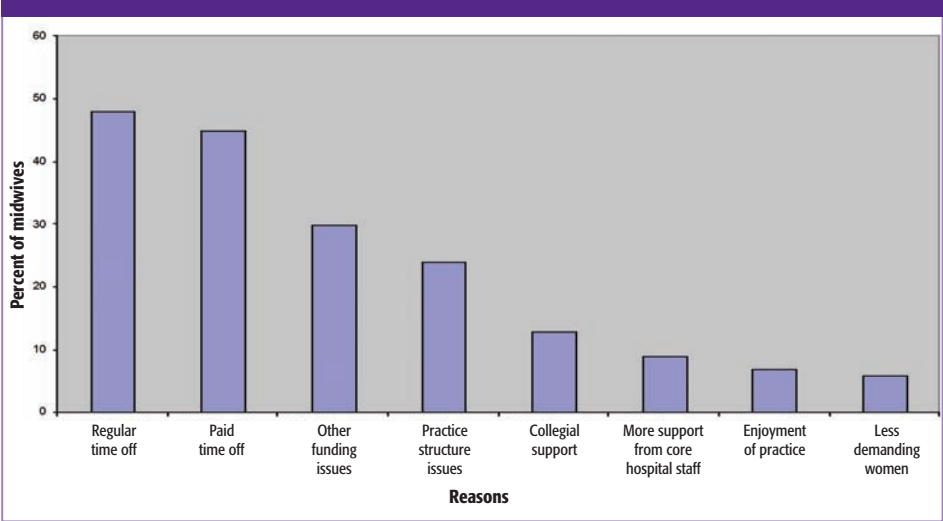
Midwives place high value on the relationships that they develop with childbearing women. Being ‘with women’ is important. Seventy percent of midwives in this study took regular time off, and yet 48% of these midwives continued to remain on call for births. What becomes apparent from the findings of this study is that tension exists between the demands of the work and the needs of the midwives. This is illustrated in Figure 3 which represents the conflicts for the midwife. Continuity of carer both supports the sustainability of practice and yet paradoxically also challenges its sustainability. Continuity leads to the rewards that come with developing trusting and fulfilling relationships with women. At the same time continuity, with the long hours and lack of time for family and friends, can also lead to exhaustion. Continuity of carer and relationships that are developed with women continue to be the main driving force for midwives continuing to practice as LMC midwives. However, the structure of LMC practice with long hours of call, along with increasing demands being placed on midwives are causing midwives to leave practice due to exhaustion. With 30% of LMC midwives in this one urban region planning to leave within the next two years, there is some urgency required in attending to this problem.

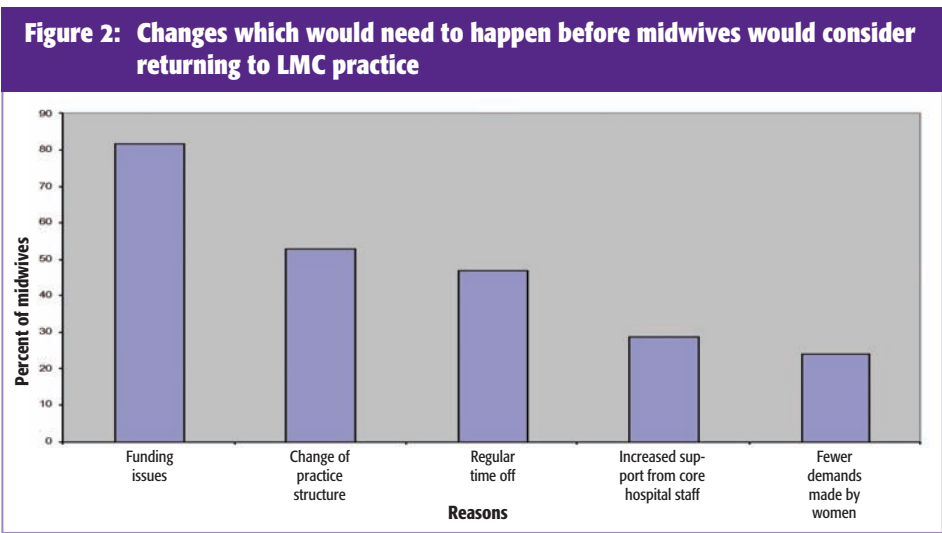
The majority of LMC midwives in this study work very long hours on call. They have their own caseload and attempt to gain support to assist in delivering care from colleagues within their group. The way care is organised is also influenced by the funding structure, which dictates the requirements of maternity payments.

The findings indicate that LMC midwives value providing continuity of carer and this is the main reason given for choosing to practice as an LMC midwife. When midwives were asked about the value they placed on working as LMC midwives, they placed the value on relationships that are formed with the women as the highest. This is consistent with findings in other studies (McCourt & Page, 1995; Proctor, 1998; Pairman, 1998; Engel, 2000; McLardy, 2003). While the benefits to midwives are evident through the literature there is also a compromise that midwives need to make when on continuous call. The compromise is the effect this lifestyle has on the midwife and her family.

Engel (2000) and McLardy (2003) also found long periods of time on call were problematic for midwives as did community based midwives in the United Kingdom (Todd, Farquhar & Camilleri-Ferrante, 1998; Stevens & McCourt, 2002; Warren, 2003). Some regarded this as being too great a cost for midwives who worked in this way

Figure 1: Reasons given by midwives which would support their staying in practice





(Sandall, Davies & Warwick, 2001). The challenges with providing continuity of care which is the reality for the majority of New Zealand LMC midwives, is in finding the balance between work and home life. Midwives are leaving LMC practice because they are either unable or unwilling to restructure their work in a sustainable manner.

Exhaustion was the main reason given by midwives in this study for leaving practice. Comments made by some of the midwives who had left LMC practice indicated that they felt disillusioned with the structure of practice. There was an expectation that midwives should be able to work for twenty-four hours at a birth, and then be expected to return to work after only a few hours sleep. It was not clear however from where this expectation originated - whether from the midwives themselves or from other colleagues. Midwives could call on their colleagues for back-up or cover. However, there were still women to be seen, as their midwifery colleagues were busy with their own caseloads, so they just had to 'carry on'.

Exhaustion and neglect of self has been recognized as a precursor to burnout (Eustace, 2003). In Engel's study, burnout was one of the reasons given by midwives who had left practice due to the high demands being made on them in being on-call for

long periods (Engel, 2000). Burnout is well recognized as a common phenomenon in the caring professions (Flint, 1995; Sandall, 1997; Benson, 1998; Rolston, 1999; McLardy, 2003).

Seventy percent of the midwives who favoured a change to practice structure indicated a move away from the continuity of carer model, to a continuity of care model with a more structured way of working. One example from this study was the 12-hour on-call system. Four of the midwives were currently working or had worked in a practice where they were on-call for 12 hours at a time. Their income was pooled and they claimed a salary so they were able to have paid annual leave, sick leave, study leave and regular time off. The midwives in this group indicated that if this structure were to change to one where they were required to work a 24-hour on-call system then they would leave. This structure of care would appear to be less disruptive to the midwives' own family and social life, and would result in less chance of a midwife having to provide care in an exhausted state.

Having adequate support and back up were important for midwives in this study, eighty six percent of whom are on-call for 24 hours per day. The standard of care a midwife provides after being

awake for 24 hours or more raises issues of safety in comparison to the care provided by a midwife who has had adequate sleep. Hinshaw (2005) recommended that nurses should not work for more than 12 hours of patient contact in any one day because of the effect fatigue has on error rates, and problem solving reaction times. There is no legislation in New Zealand which recommends the maximum number of hours that should be worked in any one day where workers are self-employed. LMC midwives therefore are expected to make their own decision about when they feel they need relief or support from their colleagues. Comments or concerns have been raised by core hospital midwives over the safety of LMC midwives who are continuing to practice when they are tired (Earl, Gibson, Isa, McAra-Couper, McGregor & Thwaites, 2002).

The majority of midwives in this study received support from family members, in particular from husbands and partners. Collegial support was an important source of support for a third of the midwives in this study. However, for just over a quarter of midwives (28%), support was inadequate. Attempts were made by midwives working within a group structure to get support from one another through having structured time off. However, while 70% of midwives stated they had structured time off, 48% remained on call for births. This does not constitute 'time off'. There would appear to be real tension between providing continuity of carer because of the relationships that are formed, and working in a sustainable manner through having regular time off. The question to be asked is whether a similar quality of relationship with women can be formed if midwives had more time off.

Having regular time off was also effected by the current funding structure. Section 88 of the New Zealand Public Health and Disability Act 2000 (Ministry of Health, 2007) determines not only how care should be provided but also how it is paid. It strongly supports the continuity of carer approach whereby responsibility of care is provided by one LMC whether she/he is a midwife, obstetrician or general practitioner. Funding is paid out on a modular basis, the bulk of which is paid out on the labour and birth module. It does not allow any extra funding if midwives need to call for back up from their colleagues. Under this structure, midwives who call for back-up because they are tired, or miss a birth because they are having some time off, can be financially 'out of pocket'.

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Table 4: Number of midwives currently in LMC practice who are planning to leave

Number of midwives planning to leave LMC practice		Percent
Within 12 months	10	14
Within 1 – 2 years	11	16
2 – 5 years	17	24
5 – 10 years	10	14
More than 10 years	1	1
Unsure	21	30
Total	70	99

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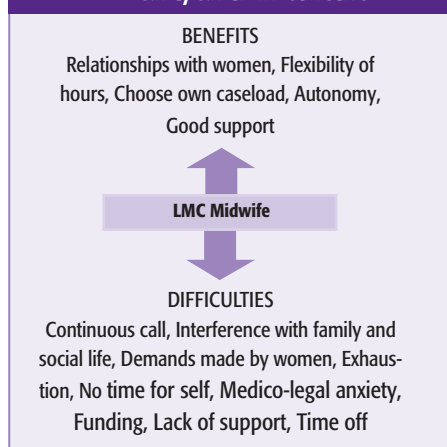
This survey has identified a significant problem in one New Zealand urban region and, as it had 100% response rate, the findings can be seen as valid especially as applied to this region. Whether the findings can be generalised to other areas of New Zealand is more difficult to ascertain. The midwives in this region are demographically similar to midwives generally in New Zealand. Their practices appear to be echoed in other studies of midwifery LMC practice undertaken in large urban regions of New Zealand (Engel, 2000; McLardy, 2003) therefore it is reasonable to suggest these results are likely to be generalisable. However the findings may not reflect the practice and attitudes of midwives who live in rural or smaller urban settings. A further limitation of this research was the structured nature of the telephone survey. Many midwives felt that answering closed questions was limiting and there was a considerable amount of qualitative information, which could only be summarized. Even given these limitations the findings should alert policy makers and midwives themselves to be attentive to ways that might improve the sustainability of practice.

Recommendations

This survey gives an indication that there need to be changes to the way LMC midwifery is practised and that there is some urgency in attending to this. Midwives clearly need more time off with better funding structures to support this. Yet at the core of this debate is the need to remember that continuity of carer both supports, yet can at the same time threaten, sustainability of practice. Any changes made must be careful lest the baby (continuity) gets thrown out with the bathwater (continuous call). Midwives need the relationships with women to sustain practice. If midwives organise themselves into large groups, or make themselves unavailable too often, the relationships with the women may get lost, lessening their satisfaction with practice. There are other options, such as small groups within midwifery practices where midwives have similar philosophies of care and women expect that, although they still have a named LMC, the midwives work as partners within this group. Women then have relationships with more than one midwife. Midwives also need to consider changes to the way they are paid. There are models where midwives pool their funding to support time off. They are then not penalised for having regular time off and not working too long. These changes can be made within current contractual and legislative constraints.

The findings of this research are disturbing. They reveal that although there has been considerable discussion about the difficulties of sustaining

Figure 3: Provision of continuity of care/carers in context



LMC practice, there are still many midwives who have not made changes in order to balance the needs of the women with their own. Midwives need to be creative, trusting and insightful to make ways of working which meet the needs of the women while at the same time support satisfying and sustainable work.

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Rural midwifery and the sense of difference

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Abstract

In New Zealand from the late 1960s the visits from the Maternity Services Committee to maternity facilities began the inexorable changes that led to a fully regionalized rural maternity service. Increased surveillance and compliance requirements in the wake of these changes accelerated the rate of rural maternity hospital closures. Throughout the ensuing decades midwives in rural areas have maintained their distinct rural identity while working to maintain a rural birthplace option for women. This identity is primarily founded on their expertise and confidence to support well women to birth at distance from secondary services. They are also firmly enmeshed in their communities and express a sense of both physical and perceptual difference from urban colleagues. Nevertheless the process of regionalization continues in subtle and complex forms driven by a mix of social, scientific and bureaucratic imperatives. Thus midwives and women in rural areas are challenged on a daily basis in their efforts to preserve a viable rural birth option.

Introduction

In this article I trace the changes to rural maternity care in New Zealand from the mid 1960s to the present day. I begin with an overview of the activity of the Maternity Services Committee and the recommendations from their reports, which accelerated the movement to regionalise, and in some areas centralise, maternity care services.

Rural midwives while caught up in these changes maintained a strong sense of identity within their communities but at times an uneasy relationship with their urban colleagues.

Centralisation of maternity care continues as referral guidelines and policies are aligned with those in urban centres. Equally significant are the changes to the social demographic profile in rural areas, improved transport infrastructure, and the exponential growth of digital technologies for diagnostic and surveillance purposes. Midwives in rural areas are responding to these changes by blurring the traditional boundaries between urban and rural and between primary and secondary care.

Getting rural maternity care under control

In 1960 the Maternity Services Committee of the Board of Health was formed to advise the Minister on matters related to pregnant women and their children. The committee consisted of health professionals including medical and nursing representatives. Of concern was the fact that the perinatal mortality rates in New Zealand although dropping steadily were not falling at the same rate as those in England and Wales. Nevertheless New Zealand ranked fifth at that time out of 57 countries (Board of Health, 1976).

The Committee undertook to visit base hospitals in each Hospital Board area. From there the members, accompanied by the local Hospital Superintendent, visited the surrounding, smaller hospitals. In several instances, however, the Superintendent did not know the doctors and staff and was unaware of the location of the units for which he had oversight (ibid).

Perinatal infant mortality figures were compared for each regional Hospital Board using the maternal domicile for the years 1963-68 and revealed major variations from a low of 15.7, to a high of 37.7, deaths per 1000 births. At that time the caesarean section rate was 4.0 % overall with forceps deliveries comprising 11.3% of the outcomes of the 63 986 confinements. In an attempt to manage the disparities in outcomes, risk categories were devised. These required the doctor to take into account adverse past obstetric history, plus factors such as age, parity, height, weight, smoking, obesity, socioeconomic status and ethnicity (ibid).

Some statistics made available to the Committee were inconsistent. For example bed numbers did not fully represent the total available, and babies were not counted unless admitted for intensive care. Obstetric records were skimpy with most

of the information supplied by midwifery and nursing staff. Midwives in the rural areas received women in labour with little or no information from the doctor with regard to their pregnancy history or laboratory reports. In addition where several doctors admitted women each had an individualised list of preferred requirements with regard to equipment, sutures, ecobolic administration and other aspects of care.

Changes to practice, buildings and equipment began in advance of the Committee's report even though the members were still touring the country. In regard to the rural hospitals, the report did acknowledge the 'useful purpose' of the small General Practitioner (GP) hospitals. In particular it noted the social advantages of freer visiting opportunities by families, the homely atmosphere and the improved breastfeeding rates. However, it cited problems particularly in the 'single handed' hospitals where there was only one doctor and, in some cases, only one midwife. The recommendation was that such hospitals should only provide postnatal care. These 'single handed' hospitals accounted for 1263 births per year in 27 hospitals. Those hospitals located more than 50 miles from a base hospital were categorised as 'remote'. Thus 22 were 'remote' with three being 100 or more miles distant (ibid).

The Committee paid tribute to the midwives and alluded to some of the frustrations of practice in rural areas stating "[i]t be midwife plays a key role in the maternity services of New Zealand. At most hospitals she is the only person providing continuous professional care for the patient throughout labour" (ibid, p. 56).

It was acknowledged that midwives naturally became part of the local community but, in so doing, became cut off from ongoing professional development and the opportunity to keep up to date. The suggestion was made that these midwives would benefit from a spell in larger hospitals to update their skills and knowledge (Board of Health, 1976). What was not considered however was that this could also operate as an exchange position and thereby be an opportunity for midwives in urban centres to experience the particular demands of rural practice.

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Rural midwifery and the sense of difference

Imbedding the changes of regionalisation

Closure was suggested for small maternity hospitals where the regulations, with regard to separate staffing for both maternity and general areas, were not being observed. The fear was that staff attending both medical and maternity patients despite the separation of the ward areas could carry infections. Further filtering of women was required as GPs were expected to select cases not suitable to birth locally. These risk criteria were extensive and included nulliparae over 30 years of age, multiparae having their sixth or subsequent baby, as well as medical and obstetric conditions thought to increase the risk of a poor outcome. However referral could be waived or relaxed *"at the discretion of a specialist gynaecologist after he [had] seen the case"* (ibid, p. 41).

A model of recommended hospital characteristics was developed which linked hospitals regionally and nationally. Obstetric units were defined as maternity hospitals with specialist gynaecological and neonatal specialist services equipped also with a flying squad for emergencies. These specialists were also to provide leadership and training for those in the peripheral hospitals. Super specialist units were to be maintained in the four major centres of Auckland, Wellington, Christchurch and Dunedin. The fate of the smaller units was to be restricted to providing postnatal care only (ibid).

While this earlier report focused on a broad range of issues relating to rural practice, the 1982 report *Special Care Services for the Newborn in New Zealand* (Board of Health, 1982) focused primarily on the neonate. The conclusions and recommendations from this report set a regionalised perinatal system firmly in place. The report acknowledged at the outset that where neonatal mortality was concerned *"the outcome for mothers and newborn babies has never been better"* (Rosenblatt, Reiken & Shoemack, 1985, p.6). However the promise was that, as specialties were developed, more could be done for the survival of infants and the reduction of morbidity. In this report the title of 'midwife' disappears being replaced by 'nurse'. This reflects the changes wrought by the adoption of the *Carpenter Report*, commissioned by the Department of Health in 1971, and was similarly mirrored when the word 'midwives' was dropped following revision of what was the Nurses and Midwives Act (1945), becoming 'the Nurses Act (1971)' (Papps & Olssen, 1997).

Future development, according to the Board of Health (1982), was to involve the identification of high-risk pregnancies and introduce a requirement for consultation and/or referral. In addition, staff at the smaller hospitals were to be educated in the skills required, and the use of equipment provided, to revive and maintain the occasional, unexpectedly asphyxiated neonate until help arrived. The North American model of regionalisation was adopted with the interests of the baby as the first consideration. Levels of care were to be from 0 to 3: level 0 being those units which did not meet minimal emergency care standards; level 1 units with caesarean section option but no paediatric specialists; level 2 units providing both obstetric and paediatric specialists. The five major hospitals in Auckland, Waikato, Wellington, Christchurch and Dunedin would provide level 3 intensive care facilities. Emergency transport teams were also to be assembled at the major hospitals to provide a retrieval service as well as ongoing education and advice for the smaller hospitals. Referral guidelines were clearly outlined and had two categories, S for handing over, and C for consultation (Rosenblatt, 1984).

In response to this model, maternity facilities have, over the intervening years, been variously redesigned, amalgamated or closed (the majority). According to Rosenblatt and his co-authors, thirty-three rural units *"closed between 1970 and 1984 [and] most of these units were the only hospitals in the rural communities that they served"* (Rosenblatt, Reinken, & Shoemack, 1985, p.429). Rosenblatt (1984) supported the need for a regionalised maternal and perinatal system with appropriate services at the three levels of acuity but felt that it had gone far enough, and that further pressure would undermine its benefits. Rosenblatt commented that *"[c]learly, eliminating level 1 hospitals as a class would have little effect on the overall perinatal mortality rate, but would force a sizeable portion of all pregnancy women to travel further for obstetric care"* (Rosenblatt, 1984, p. 115). And that *"[i]n a regionalised system, some women will be transferred to specialist centres unnecessarily; others will suffer*

unanticipated complications in hospitals ill-equipped to deal with them" (ibid, p. 81).

Donley (1998) also protested the continued process of regionalisation and the closure of the small units. She saw these developments as a serious threat to primary birthing options for women 'sweeping' them into secondary and tertiary care.

Changes however continued into the next decade as the regionalisation process continued across the broad sweep of rural New Zealand affecting all health service provision.

Rural midwives' sense of difference

Further unanticipated change to how maternity services were managed occurred in 1990 when rural midwives along with their urban colleagues seized

their autonomy with both hands following the law changes wrought by the 1990 Amendment to the Nurses Act (1977). Midwives in rural practice at this time embraced their enhanced role with fresh enthusiasm and devised new ways to offer women a rural birth option including home birth, which in some areas had not been available previously. They brought to this role a particular sense of rural identity. But what was different? What could they contribute to women's experience that was uniquely local?

The topic of my masters research (Patterson, 2002) provided an opportunity to revisit the ten years following the changes in 1990 through the eyes of former colleagues. The conversations provided a rich mix of anecdote, rural wisdom and personal struggle. A strong theme for these midwives was a deep sense of community commitment. This was experienced as both a privilege and a burden as these midwives and their families were inextricably entwined within their communities both historically and temporally. Thus any sense of separateness - professional separateness - between the midwife and her client could not be maintained.

Remaining also was a sense of difference and of some marginality with regard to their urban colleagues, this being most obvious at the interface with secondary services often at the point where

A strong theme for these midwives was a deep sense of community commitment. This was experienced as both a privilege and a burden as these midwives and their families were inextricably entwined within their communities both historically and temporally. Thus any sense of separateness - professional separateness - between the midwife and her client could not be maintained.

transfer of care was required. While this was sometimes challenging, at other times it was simply a sense of not being the same and of having come from a different place with a woman who was also a stranger in that new place (ibid). My personal memories are of long and nauseating ambulance trips in the small hours of the morning during which I would rehearse how I was going to package the handover to avoid looking like the country hick; mindful that my reality and understanding of the woman and her circumstances could be dismissed as irrelevant in the context of the changed situation and need for additional care. So it would seem that, despite the passage of time since regionalization had been instigated, there remained a lack of understanding as to the complex role and decision-making required of midwives in rural areas.

Developments in science and technology continue to increase the options that both women and midwives need to consider for pregnancy and birth. One major innovation is telemedicine.

Most significant was the midwives' belief in the ability of well women near term to birth spontaneously. And, while this is shared by most midwives, the quintessential difference for these rural midwives was that they were comfortable to facilitate birth for women at a distance from secondary care. Thus it is these three components - community entanglement, a rural/urban difference, and the belief in a woman's ability to birth locally - that I offer as elements of a rural midwifery discourse (ibid).

This sense of difference was recorded by Marion Hunter (2000) as she explored the notions of clinical freedom and responsibility in a small maternity unit compared to a large obstetric hospital. The midwives at the rural facility suggested that they felt they were doing 'real' midwifery, and had more autonomy. There was a sense of not having to rush, nor watch the clock, nor be expecting the knock on the door from core staff seeking information about progress.

Maggie Baird too, an experienced rural midwife, records this sense of difference felt by rural midwives (Baird, 2005). In her qualitative descriptive study she uncovered three major themes: living rurally, being a rural midwife, and sustaining rural practice. In living rurally the midwives found that they had chosen the place first and then began to work there. Their relationship with their commu-

nities had the benefits of insider knowledge about the women they cared for and there was a sense of pride in their rural midwife status. In addition they found that they were very visible and accessible and could find it hard to say no, with the result that balancing their caseloads could be difficult. There was a belief that they had the best opportunities for working autonomously and experiencing normal birth in the homelike environments of the rural facilities, though they felt some tension when they were approached to support women

choosing to birth in secondary care. However in some cases the women decided to stay local once they got to know the midwife. Overall the midwives expressed an all-prevailing sense of responsibility, which was both scary and satisfying.

Social and organizational change in rural New Zealand

In recent years, however, many rural midwives have expanded their role to one that includes managing complex obstetric problems for some women in the community on behalf of the obstetric team. This is partly about keeping a local service viable by attending women locally but also to provide a service for women who otherwise would need to travel to urban centres throughout their pregnancy for every test or assessment. Providing this level of oversight blurs the boundaries between the primary care focus at the local level and the care that would ordinarily be offered in the secondary/tertiary centres. This trend in Lead Maternity Care (LMC) practice has more recently been explored by Skinner (2005) and Davis (2006) in interviews with midwives.

Rural/urban characteristics are also less distinct. This is reflected in the changes to the rural demographic and commercial profiles. Traditional groupings of farming families and those servicing the rural sector remain, but others have moved to rural areas for economic or lifestyle reasons. Improved roads, the dependability of modern vehicles and the lure of large urban shopping complexes attract rural dwellers to the city areas more frequently than in the past. Thus, for many, bypassing the rural maternity unit does not have the significance it once had.

Structural changes have also occurred with the formation of, and funding devolution to, District Health Boards (DHBs) and Primary Health Organizations (King, 2000; King 2001). Many hospitals have been replaced by leaner multi-functional medical facilities centred on GP practices, some of which offer primary maternity care. These structural changes were captured by Chris Hendry when she used a modified environmental scan, to provide an overview of South Island rural maternity services. The intention was not just to provide a snapshot of the extant service arrangements but also to try and capture the complexity of these services within their respective contexts (Hendry, 2003).

The range of services offered in the rural maternity facilities varied, with some premises equipped and staffed to offer 24-hour emergency care on-site, whilst others were opened and staffed only as required (ibid). This study clearly demonstrated the complex ways in which the rural midwives went about advocating and delivering care for the women in these rural areas.

Skinner (2005) observed that one unique feature of the New Zealand maternity system is that women choose first their carer rather than their place of birth. Thus the place of birth may not be firmly decided until quite near the due date, or even after labour has begun. This is potentially the case for midwife LMCs in rural areas where the domicile of the chosen midwife has an impact on whether or not rural birth would be considered. What is clear is that midwives in rural areas are assuming responsibility for an increasingly complex case mix. Many rural midwives attend women wherever the woman chooses, or is recommended, to birth. This may mean at her home, the local rural unit, or at a secondary or tertiary hospital.

This flexibility, particularly in the south, is driven partly by lower numbers choosing to use the local facility and the concomitant effect on the midwife of a reduced caseload. Thus LMCs, whether self employed or paid a salary by a local Trust, may provide a range of options in order to gain a viable income. So even defining a rural midwife appears problematic. If a definition is required it may be that a rural midwife is someone who confidently supports women to birth in their local area, at distance from secondary services (Patterson, 2002).

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Rural midwifery and the sense of difference

New technology linking rural facilities with secondary care

Because pregnancy is a natural event and not a disease, there is considerable concern that increasing emphasis on the technical aspects of obstetrics may transform a normal and emotionally momentous human process into a medical event (Rosenblatt, 1984, p.1).

Developments in science and technology continue to increase the options that both women and midwives need to consider for pregnancy and birth. One major innovation is telemedicine. While remote monitoring with telemetry was found by Warriner and Martinez (2006) to improve the quality of the service available to the women, and as a means of expanding the skill and knowledge of the midwives, this option adds a further challenge for rural midwives endeavouring to maintain a normal birth focus. For example digital technology, such as telemedicine, promises to extend the possibility of virtual imagery for distance consultation. The concern would be that such procedures would become routine, and would transform women into disembodied virtual images divorced from their environmental context, with midwives acting as the invisible conduits and with rural units becoming mere satellites of the base hospital (Larkin, 2003; Sandelowski, 2002).

While in some situations such tools could prove invaluable, like all technological advances they can be a mixed blessing. On the one hand they can provide expertise not available locally in complex or urgent situations, but on the other over-dependence on them could erode the skills and confidence of rural practitioners (Nesbitt, 1996).

Conclusion

Midwives in rural areas have continued to believe in and support a local birth experience for women while maintaining the linkages necessary for safe and appropriate care within the maternity system. However a rural birthplace option remains tenuous as the regionalisation project continues in new and complex guises. There is now a closer alignment with secondary and tertiary care facilities with regard to practice policies and guidelines, and a reliance on District Health Boards for funding and service arrangements. The composition of rural communities is changing as the land is opened up for commercial and lifestyle opportunities. Similarly the boundaries are blurred

for midwives who move between the rural and urban areas and between primary and secondary care. These movements are being driven partly by the proliferation of antenatal screening tests and technological options currently on offer.

For the future change is inevitable, but rural midwives will have the tools of their unique community identity, their staunch support for normal birth, and where appropriate, the judicious use of distance technologies to help them ensure birth can continue to happen in rural areas.

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I have been thinking a lot recently about the value of communication and collaboration to the midwifery profession, both here in New Zealand and worldwide. Nothing beats the good old-fashioned face-to-face get-together (especially when it is with a couple of glasses of wine) and let's not forget the humble telephone. Yet time constraints and geographical location can make it very difficult to attend meetings, keep up to date and even participate in discussions that have wide-ranging implications for the profession. This is where the Internet and online communication tools have their value. The flexibility of asynchronous communication such as email overcomes the barriers of time zone and physical location. Instant messaging allows real time communication and using a webcam deals with the problems of not being able to see the person you are communicating with. Of course I must acknowledge that these technologies have their problems not least access, cost, and a lack of computer skills. However, with the number of free community-based learning programs available, the opportunities for updating computer skills have increased. Here are a few web-based tools that help communication and collaboration with some ideas about how we can use them.

Skype (<http://skype.com>)

Skype is a program that is downloaded onto your computer and allows you to make free voice calls to another person like a telephone call, anywhere in the world as long as they have Skype on their computer. Skype also allows you to use instant messaging (write messages) and make video calls as long as you both have webcams (video camera). Webcams are very cheap to buy – anything from \$20-\$100, although it is probably better to spend a little extra and buy one that has higher capabilities. Whilst the connection is better if you have broadband, you should be able to utilize Skype's basic functions with dial-up Internet connection. If you want to talk to more than one person at a time, you can organize a 'Skypecast' by logging onto <http://www.skypecast.com>. I would advise you to keep your conference session restricted to only those you invite, otherwise anyone who has access to Skype can join your session. This is a very cost-effective way to carry out conference calls, especially if participants are living overseas.

The only disadvantage is that you cannot show PowerPoint slides as you talk, which you might want to do if you were running an online teaching session or presentation. However, you can post the presentation to the participants, in the same way you would send an email. I have been using Skype for discussion and collaboration with colleagues, and also my research supervisor in Australia, which has saved me a fortune in phone bills.

<http://lornas-musings.blogspot.com>

A blog is an ongoing commentary or diary that is published on a website. There are a number of online programs that host blogs such as <http://www.blogger.com> or <http://www.blogspot.com>. Setting up a blog is very easy and allows you to add text, photos, movie clips, and so on. Blogs are used for a range of functions from simple online reflections to sophisticated teaching tools or social and political commentary. As midwives we can use blogs as a means of keeping in touch with family and colleagues, advertising our services and collaborating with projects. For example, you may decide to write an information leaflet for women about pain in labour. Publishing the

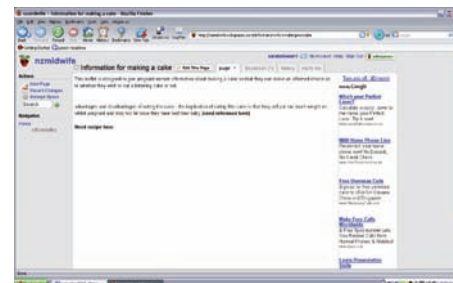


leaflet in a blog allows people to read it and give feedback which you can then utilize as you wish. The blog can be closed if you do not want to make its contents freely available. The thing you must remember, as with any kind of online publication, is that you should only publish what you are happy to anyone to see. If you want to make libellous comments about your employer, a blog is probably not the place to do it! I have recently started a blog and welcome any comments: <http://sarah-stewart.blogspot.com>

<http://www.wikispaces.com>

A wiki is a collaborative website that you not only read and make comments on, but also can personally edit. If you are working with colleagues to develop guidelines about eating in labour, rather than emailing each other which can be cumbersome to manage, you can use a wiki to develop the document. Wikispaces.com is one resource you can use to develop a wiki. Once you have joined, then you add people to it. The wiki is available for anyone to see, but only the invited members have the ability to edit the material. You do have

to be careful if you 'cut and paste' a document into this program. If the document has had a lot of prior formatting, the wiki program may find it difficult to handle, so it is better to paste in material that has had minimal formatting. Along with the ability to edit a document, the wiki has a discussion area where you can email each other with comments which you may use for explaining



the edits you make. Although it is a little confusing initially, as with many computer programmes, this one is reasonably easy to use once you get used to it. I have created a 'space' that you may wish to visit and make a contribution: <http://nzmidwife.wikispaces.com/Information+for+making+a+cake>. It is a fun activity with the aim of developing an information leaflet for pregnant women to enable them to make an informed decision about eating cake in pregnancy. Once you are in the page and wish to edit it, click onto the tab 'Edit this page' and make the changes or add any material you wish.

The most famous wiki that people are familiar with is wikipedia. There is a small entry about midwifery in New Zealand but it needs to be developed and referenced: http://en.wikipedia.org/wiki/Midwifery#Midwifery_in_New_Zealand

<http://del.icio.us>

Keeping a track of websites can be problematic, especially if you use more than one computer. Del.icio.us is a program that allows you to record or bookmark your favorite websites from any computer. If you are at work and want to access a website that you have saved on your home computer, Del.icio.us makes that possible. If your computer crashes, there is no concern that you will lose all your bookmarks. The program also allows you to share your bookmarks with other people. This is particularly beneficial if you have been working with colleagues on a project and want to share the websites you have found to be useful to the project. Del.icio.us is a very handy tool that encourages social networking. In other words, it allows you to network with people who have the same interests as you, which is particularly helpful if you are involved in any sort of project development or study. The only downside is that you can become easily distracted with surfing other people's bookmarks and end up completely off task!

A hermeneutic analysis of the rise of midwifery scholarship in New Zealand

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Abstract

In the past 25 years there has been a significant rise of scholarly activity, meaning university-based postgraduate education and research, amongst New Zealand midwives. This paper records stories of that change, accessed through a hermeneutic research study. The analysis is through the viewpoint of the author, Liz Smythe, who was one of the first New Zealand midwives to gain a PhD supervised by midwives, about midwifery. She uses her own story as a scaffold to view the stories of her peers. Five other midwives participate in this study, with data drawn from interviews and written reflections. The purpose of the study was to capture stories pertaining to scholarship to reveal the manner in which a variety of individuals, each choosing her own pathway, came to establish an early wave of New Zealand midwifery research-based scholarship. It is a snapshot of history that offers insight into the play between profession, practice, and scholarship. Some of the key leaders, notably Joan Donley, had minimal involvement with university life. Karen Guilliland and Sally Pairman addressed the professional/practice issues from outside university and later turned to university-based scholarship to document the insights. Others, such as Liz herself, attained tertiary qualifications and were ready for the new era of degree level training. Some doctorally prepared midwives came from overseas to share the leadership of postgraduate education and research. A strong theme emerging from the study is the huge commitment the scholarly leaders made in the development and reshaping of midwifery. Questions are raised about the future of midwifery scholarship in a climate of fierce competition for research funds. It is argued that scholarship is vital to underpin and guide the midwifery profession, but at what cost to the individuals involved? What strategies are needed to ensure scholarship remains strong and responsive? These questions need to be addressed by the profession.

Introduction

Hermeneutics is about life-experience and belongs

to it. Hermeneutics is the lived experience of lived experience (Crowe, 2006, p.26).

This paper is written to articulate the lived experience of the rise of midwifery scholarship in New Zealand. By 'scholarship' I mean involvement in university study, and, for this research, those midwives beginning postgraduate study in the era of the 1980s when midwifery was in transition from hospital-based training to polytechnic education. This pioneer group of midwives went on to do masters and doctoral research 'in midwifery'. I draw from the philosophy of hermeneutics, which recognises that one can only understand the experience of others through the lens of one's own historical being-in-the-world. Thus as author I acknowledge the interpretations as my own. My own story is the scaffold on which this bigger story is told. I share it to enable readers to discern the standpoint from which I interpret, and because the insights of 'my story' so strongly colour my passion and commitment to scholarship. I do not seek to track the historical milestones of the transition to a university-based structure of postgraduate education, but rather to tell stories. Harman (2007, p.28) says life is always 'thisly': *this* life, in *this* time, with *these* people, doing *this* thing. Stories hold the 'thisness' helping us resist the temptation to reduce life to theoretical constructs. Throughout the paper I use the word 'us' to refer to my perception of what the community of midwives I was a part of, at the time, was thinking. This is of course an assumption, yet from the perspective of hermeneutics we become "*swept in a further tendency of life*" (Crowe, 2006, p.81) by something bigger than 'my own view'. I am not saying each and every person believed the interpretations I offer. Rather, this was my sense of what 'we' thought. Is this paper therefore 'research', or a personal account of my own scholarly journey? From a hermeneutic perspective, it is both. It is a scholarly, research based analysis of the lived experience of a small cohort of midwives who were at the forefront of postgraduate university based midwifery education, interpreted from the horizon of my own experience. It is the lived experience of lived experience (ibid).

Methodology

The word 'hermeneutics' emerged in the seventeenth century to mean the "*science or art of interpretation*" (Grondin, 1991, p.1) although its roots can be traced back to the writings of the ancient Greeks. Gadamer, a key writer on philosophical hermeneutics, is clear that prejudices or pre-understandings are the very conditions by which we

understand. The challenge is not to set them aside but rather to work with them in the quest towards understanding. We come to understand through the history into which we were born and now live. "*It is history that determines the background of our values, cognitions, and even our critical judgement. 'That is why,' says Gadamer, 'the prejudices of the individual, far more than his judgements, constitute the historical reality of his being'*" (ibid, p.114). My own prejudices arise from beginning hospital-based nurse training in 1971, doing midwifery training through a 6 month course at a St Helens Hospital in 1979, and being indoctrinated into a hierarchical, task-based system of practice. Formal learning tended to be a matter of regurgitating information; yet in the midst of practice 'learning' was a daily challenge of trying to cope with new, complex, stressful situations where life and death could sway in the balance.

Understanding is always a dialogue between self and other (other being text, person or artefact). "*In this dialogue there are no statements, only questions and answers that call forth new questions in turn*" (ibid, p. 119). Understanding is therefore always a quest, always on-the-way, always personal. The journey never ends for, as the context ever changes, so too does understanding need to realign itself with the unfolding stories. It is as though our being exists in a kaleidoscope that can never return to a previous pattern, yet over the generations the understanding of what it means to be in the midst of such patterning is known and shared.

Method

Ethics approval for this study was gained through Auckland University of Technology Ethics Committee. The choice of participants was my own, based on my personal network. One responded to an open invitation to offer written reflections, and the other four were interviewed. Karen Guilliland and Sally Pairman figure prominently, for I believe much of the current health and strength of midwifery in New Zealand is owed to their huge commitment and tenacity. Gillian White, who trained in England as a direct entry midwife, talks of her early recognition that midwives needed to be doing their own research. Cheryl Benn and Maralyn Foureur (previously Rowley) are included as midwives who arrived in New Zealand with nearly completed doctoral qualifications to enable New Zealand midwives to do research under midwifery guidance. My own story was gathered by a written reflection and a tape-recorded interview. All participants were engaged in postgraduate study in the 1980s and

90s, and beyond. Karen has been Chief Executive Officer of the New Zealand College of Midwives since its formation in 1989 and has a masters degree. All the others have doctoral degrees and work in education. Some have attained positions of Associate Professor and Professor. Because it was likely that stories would reveal identity, ethical approval was gained to name participants. Data have been returned to participants for re-approval prior to publication.

The interview sought to elicit each person's story. I began with questions about pre-registration midwifery education and encouraged each person to keep telling the story, keeping the focus on 'scholarship' but recognising the journeys 'towards' and 'through' were all unique. Interviews were transcribed and transcripts were read and re-read. Stories were taken from the transcripts and crafted to reveal 'meaning' more distinctly (Caelli, 2001). I wrote and re-wrote interpretations of the stories to try to reveal scholarship as it showed itself in the context of that person's experience, recognising the 'with-world' relationships, 'with-people' relationships, 'with-self' relationship revealing mood and concern, all of which are experienced in 'time' (Schmidt, 2006). The process of such interpretation is described by van Manen (1990) as dwelling with text, intuiting meaning, writing and re-writing. The trustworthiness of this study does not lie in whether my interpretations are 'true' for they can only ever be 'as I understand' but whether I have enabled the readers to share in their own interpretive process and arrive at their own insights. The crafted stories were returned to participants prior to inclusion to ensure their right to withdraw or restate data. They are 'their' stories yet interpretation comes with prejudice of the researcher (Gadamer, 1982; Smythe, 2007).

Interpretive insights

Stepping into University Study

I begin with my own story of leaving my job as a charge midwife in Delivery Suite to go to university:

In 1985 that I should be going to University sent shock waves through my community of midwives and doctors. There was one paediatrician who I remember shaking his head saying 'but why?' He kept saying to everyone 'why would a midwife go to university?' Colleagues in Delivery Suite all wanted to know 'what are you learning?' I remember writing back saying for the first time ever in my education I am learning how to think. I did an essay in English Literature critiquing an essay written by Cardinal Newman. I wrote about his

beautiful transition from one paragraph to the next etc, saying how excellent I thought it was. The tutor who marked it said "but his argument was rubbish". I thought 'goodness they expect me to have an opinion of my own!' That was mind-blowing. I'd assumed because the teacher had given it to us, it was good. Just that learning to critique, learning to bring my own voice (author).

We currently assume that it is fitting for midwives to attend a university to advance their learning. In 1985 it was considered odd and unnecessary. I quickly came to see the impact of being asked to 'think'. When one has been schooled in obedience and 'right' answers it was a huge leap to suddenly challenge and voice a contrary opinion. For me, university study, in the era of feminism, and the Cartwright Inquiry (Coney, 1988), with Marxist theory permeating academic thinking, encouraged a strong critique of the status quo. Yet within New Zealand midwifery such thinking was also happening beyond the walls of university:

While I was burying myself in the scholarship of academia Joan Donley was hard at work publishing 'Save the Midwife' (1986) drawn from her own self-taught insights. When I came back to Auckland for my mid year break midwives gathered at Massey University and started talking 'autonomy'. I was in the ivory tower while midwifery was quietly getting on with its renaissance (author).

The rise of 'thinking' in New Zealand midwifery was strongly influenced by Joan Donley. Her book challenged midwives on all fronts and called for a rethink. She wrote that the midwife had been: "upgraded and refurbished to become a nurse-midwife, a hybrid, a medically-oriented handmaiden, while the real midwife is an endangered species" (1986, p.11). In the spirit of Joan's embodied feminist perspective, she helped us to see that the emancipation of midwifery required political action. Her own midwifery experience fuelled her passion:

As a midwife in the controversial domiciliary field for 12 years, my knowledge of the subject is more

than merely academic. Personal involvement in the political battle to keep the home birth option open has provided insights for analysis I could never have gained from a seat outside the ring. In fighting this battle I had to go back—to research the historical background. Therefore, this book was written to clarify these issues and to provide an understanding of the historical/ political developments without which no battle can be successfully fought. (Donley, 1986, p.12)

A strong theme emerging from the study is the huge commitment the scholarly leaders made in the development and reshaping of midwifery. Questions are raised about the future of midwifery scholarship in a climate of fierce competition for research funds. It is argued that scholarship is vital to underpin and guide the midwifery profession, but at what cost to the individuals involved?

Joan led the way for those of us who had become politically awakened in showing that 'what mattered most' came from the understandings of experience. Her metaphor is of 'fighting the battle'. The tactics of warfare were required by both academia and politics.

Gillian White voiced her experience of those times in the mid to late 80s:

Imagine teaching in a course to educate midwives as a profession subsumed by nursing [Advanced Diploma of Nursing]... It was not a sustainable position for me...the battles we had were with politicians, the medical profession, NZNA, nurses and often with midwives themselves. Wellington midwives did not always agree with Auckland midwives and the South did not always agree with the North. (Gillian White)

Challenging the status quo and identifying strategies for change meant disrupting vested interests, removing comfort and control, and challenging what until then had been considered 'how it should be'. There were battles on all fronts with the ground of education in the midst of it all, for decisions around who controls education set the pedagogy, philosophy and possibilities for the next generation (Pairman, 2006). I remember these tensions. Heidegger talks of inauthenticity and authenticity: "One is characterized by complacency, distraction, and self-concealment, while the other is marked by commitment, struggle, and sober responsibility for oneself. One kind of life is, ultimately, a failure to "own-up" to oneself, while the other is a life of profound honesty" (Crowe, 2006, p.70). This was an era of New Zealand midwives boldly trying to regain the authentic heart of midwifery

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practice. In the struggle, responsibility to take on battles with those who had vested interests in the status quo required courage and tenacity. Amongst midwives in those early days of change there were many content to stay with familiar ways and not disturb their comfortable world.

Making universities more accessible to midwives

In 1989 the New Zealand College of Midwives was formed. The first undergraduate direct entry midwifery degree programme was established at Otago Polytechnic in 1992, led by Sally who had a degree in English literature done prior to her nursing and midwifery training (Pairman, 2006). Auckland Institute of Technology, where I was teaching midwifery, started with a direct-entry diploma programme in 1992 (Gunn, 1992), which became a degree in 1994. By that stage I had my BA (Social Science) majoring in 'nursing' even though every assignment I had done was related to midwifery. Huge changes were afoot in the shaping of midwifery as a profession. The postgraduate focus followed closely behind:

We started a campaign with the universities that midwives should be able to go straight into Masters... I think we did a campaign where we wrote to all the universities saying it's time things changed. (Karen Guilliland)

My road to scholarship was the equivalent of a full three-year undergraduate degree before I could enter a masters programme. Later midwives had some reduction of papers in recognition of their professional qualification, gaining what was seen as the equivalent entry standard to postgraduate programmes. The College of Midwives however did not think this was good enough. Karen forged the way by proving her own capability of achieving at masters level without an undergraduate degree. She was accepted into the Victoria University Masters programme with an Advanced Diploma Qualification.

Scholarship following in support

A key feature of the rise of scholarship in New Zealand is that in many ways the political action came first and the formal scholarship followed behind. This is clearly seen in the stories of Karen and Sally:

We [Sally Pairman and I] worked really well together. She's the 'detail' and I'm the 'big picture'. We said, 'why don't we model what we keep saying about how midwives and women work together? We want to do something in partnership'. So Jill White [Victoria University] had to do all sorts of things in the university to allow us to use the one thing as a special topic for both of us. The

model of partnership that we published from that may look tiny and simple but it took 10 drafts of the bloody thing to make it that tiny and simple. (Karen Guilliland)

The idea to work on articulating our philosophy of midwifery came out of our experiences of trying to bring about change, and my experiences of working as a home birth provider, and the experience of the politics of getting College established. We just felt as though midwives needed something to kind of hang to, to frame up their work, to help them see what it was that this partnership actually meant. We had already adopted it as a College. We had it in our standards, we had it in the philosophy. We hadn't defined it, and it was like, "What is it?" And we had that experience of actually working in partnership, both from a political and the practice level. So it was trying to write about that. (Sally Pairman)

Karen and Sally were both key players in the establishment of the College of Midwives, winning autonomy and articulating the philosophy of practice that moved from creating dependency to building partnership. They had travelled the country talking with groups of midwives but knew that was not enough. Scholarship provided the vehicle to both firm up their thinking and disseminate it as the focus for New Zealand midwives. While political action created change, scholarship needed to follow closely behind to give structure, stability and credence. Further their monograph *The Midwifery Partnership: A model for practice* (Guilliland & Pairman, 1995) became an example of scholarly capability and possibility.

In the same year Valerie Fleming graduated with New Zealand's first doctorate in midwifery. Her thesis was entitled 'Partnership, power and politics: feminist perceptions of midwifery practice' (Fleming, 1995). Gilkison wrote: "*This is New Zealand's first major piece of research on a midwifery topic... In order to establish and declare midwifery as a profession in its own right and to create our own body of language, this kind of research is extremely important.*" (Gilkison, 1995, p.11). Looking back one wonders whether the impact of the research itself was as significant as the fact that we now had a homegrown doctoral qualification.

Bringing in academic expertise

With pre-registration midwifery education as a degree programme, a growing number of midwives were stepping into masters study as the next step of their education. On the principle that educators should have at least one degree higher than the level of their students, there was a need to attract doctorally prepared midwives to

New Zealand. Valerie Fleming, one of my PhD supervisors, moved back to Scotland. At that time there would have been no other midwife able to supervise me if Cheryl Benn had not moved to New Zealand:

We lived in an area [of South Africa] where down the road there were batteries of gunshots every night. We always lay in bed listening how far is it coming up the road? We decided we had to look for better options. My sister-in-law who was in Finland at the time knew that we were looking. She emailed us and said, "There's a job going at Massey University". (Dr Cheryl Benn)

People need incentive to leave one country and move to another. The rising danger of South Africa gave Cheryl that incentive. A chance 'find' via Finland opened the door for her to come to New Zealand where she took over the supervision of my PhD. Without Cheryl I would have had no choice but accept guidance from a non-midwife. I tell this story to show the challenge of growing 'scholarship' when there are so few to lead the way. For Cheryl it was not only a culture change of country but also of research methodology:

When I did my PhD in South Africa, quantitative methodology was very predominant... When I came there weren't many people doing any quantitative work at all at Massey. My growth in qualitative was enormous over those first years. (Cheryl Benn)

Cheryl bought an expertise in quantitative research methodology to face a nursing and midwifery community who had embraced qualitative approaches. My supervision was a wonderful experience of partnership where Cheryl freely offered me all her scholarly wisdom and together we tried to understand the nature of my phenomenological journey, exploring the meaning of 'being safe' in childbirth (Smythe, 1998, 2000, 2001, 2003). Visiting scholars such as Professors Nancy and John Diekelmann taught us both. It was a learning community where we all supported and encouraged each other.

I met Maralyn Foureur in the back of the shuttle bus going to the College of Midwives Conference in Christchurch in 1996. She had come from Australia with her very nearly finished PhD to (ultimately) take on a Joint Chair of Midwifery with Victorian University and Wellington Women's Hospital. I remember the sense of awe I had for such a practice-focused scholar. She talks about why she came to New Zealand:

The midwives in Australia currently are unable to get professional indemnity insurance unless they are employed by a hospital... So the numbers of midwives in independent midwifery practice is limited. One of the reasons that I came to New Zealand was because of the midwifery-led maternity care that is here. I wanted to see how it was working and for me that was a big shock. All of my research and my reading had said low intervention is the consequence of midwifery-led maternity care - and it's not. The intervention rates are going up and up here (as elsewhere), so from a research perspective, it is very interesting to try to work out what might be happening. So now I explore and write about the complexity of maternity care and the power relations that impact on women and midwives. (Maralyn Foureur)

Maralyn had a scholarly interest/passion in midwifery led maternity care. New Zealand midwifery offered itself as a huge case study. How would outcomes of birth change within this 'experiment' of giving midwives autonomy to make decisions with-women rather than always with-doctors? Maralyn has moved back to Australia 10 years later, a decade that has seen a global increase in intervention in childbirth, pondering the complex power relations that hold sway and somehow undermine the belief and courage that birth with minimal intervention is not only possible but desirable. Her scholarship seeks to unravel and offer insights. Meanwhile, in the time she was in New Zealand her scholarship has guided other New Zealand midwives, including Joan Skinner's doctoral study 'Love and fear: risk and the midwife' (Skinner, 2005).

How does scholarship show itself?

What difference has scholarship made to the practice of midwifery? Was my perplexed paediatrician right in thinking it was rather a waste of time and money? Gillian talks of how she came to see the need for scholarship:

I returned to clinical practice...I watched as nursing/midwifery practice appeared to be at the whim of each individual...I saw nurses and midwives attempt to defend their practice against 'evidence based medical practice'. I was always unconvinced of the quality of the evidence but the doctors were in a more powerful position and undertook 'research'... I decided that the best way I could serve midwifery was to gain research skills and defend midwifery practice from a research base. (Gillian White)

I remember sitting around Joan Donley's kitchen table in the late 1980s writing submissions to win midwifery autonomy and hearing Joan say "but

we need the evidence". Passion and belief are in themselves not sufficient to convince those who not only hold power but also have vested interests in maintaining that hold. Gillian recognised that midwives needed to gain research skills that would enable **midwives** to decide what needed to be researched, to determine how that would be done and then to have control over the dissemination of findings. Only in that way could their practice wisdom be offered as evidence. Her masters thesis followed her interest of midwifery education (White, 1990).

Karen tells her story of also seeing the need for establishing evidence:

For my masters thesis I set up a midwifery database that became the New Zealand College of Midwives database. I went to ICM [International Congress of Midwives], I met up with the Canadians who had a database and the American College of Nurse Midwives database people. I had the obstetric notes that the Ministry had here. I just put all those things together and came up with a new database. I really don't know how I did it. I sort of nugged my way through it and got it out. I didn't own a computer, I couldn't work one and I was doing a database! (Karen Guilliland)

This story shows the pioneering spirit of those times. Karen set about the task of establishing a database by taking an investigative tour of world. She then had to learn the related skills of technology. She found the 'know how' along the way. The database of the New Zealand College of Midwives was thus established early in its history to collect, collate and analyse evidence.

Sally, needing a doctoral qualification to advance her educational career, looked back to all that she and others have achieved as part of the commitment to shaping a robust midwifery profession in New Zealand. It was story that needed to be documented:

What I've done in my doctorate is identified four strategies that I think have led to the professionalisation of midwifery in New Zealand. I've looked at the partnership model and the impact that that has had in New Zealand and internationally. I've looked at midwifery education, and how we've developed the midwifery profession through what

we've done with education. I've looked at the College of Midwives and its role in meeting professional standards. And I've looked at the Midwifery Council, and the regulation. Those four strands integrated to create this profession that we've got, and bring it about. Over the years I've worked in each of those strands, so it really helped me to be able to see that the work that I've done on these things, has actually had some impact on where we are now. (Sally Pairman)

When I meet the new generation of student midwives, it is with shock I realise they do not know

a time *before* the College of Midwives. They take for granted that there is a Midwifery Council. They naturally accept that they are in a degree level programme and that they do not need to have a nursing qualification to get into the programme. The partnership model is assumed to be that way midwifery has always been practiced. Sally's scholarship (Pairman, 2005, 2006) stands as a reminder of what was

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before and documents the huge commitment, political strategising and professional growth that have brought New Zealand midwifery to its current place. At the same time it reminds us of the contextual, ever changing nature of what it means to be a midwife.

Maralyn signals the impact a strong piece of work can have on global midwifery:

The original paper I published from my PhD gets cited about a hundred times a year. (Maralyn Foureur)

When there is research that presents evidence, in this example that midwifery-led care makes a difference to childbirth outcomes, midwives and others from around the world seize it to fight their own battles (Rowley [aka Foureur], Hensley, Brinsmead, & Włodarczyk, 1995).

In 1988 there was a midwifery conference in Auckland at which Caroline Flint, author of 'Sensitive Midwifery' (Flint, 1986), galvanised New Zealand midwives. Joan Donley laid down the challenge: "Today we must decide whether we become *moas*¹ or midwives" (Donley, 1988, p.6), and argued that

¹ A moa is a large bird once prevalent in New Zealand, now extinct.

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the only way for us to survive was to break away as a group from the professional body of nursing, and form a College of Midwives. I remember how courageous and exciting that moment felt as individually we stepped forward to make that commitment by paying a membership fee. Ever since, the touchstone of the past two decades has been the biennial College of Midwives Conference. Sally states:

I must have spoken at every midwifery conference since the College of Midwives began. I think to start with there weren't that many people there who were prepared to actually get up and speak, so we ended up doing it because we'd overcome our anxiety, to some extent anyway. ...I'm really delighted to see so many of the younger ones coming through. And now we've got so many more midwives who are doing research, who are doing scholarly activities and want to talk, and it's fantastic. (Sally Pairman)

I remember Sally presenting at the 1988 conference and being in awe of her scholarship, just as I now cringe at the naivety of my own. We were all new at this, learning from each other, and inspired by international keynote speakers. In 2006 abstracts from would-be presenters were being turned away because of the excess. Midwifery research is flourishing. Our own scholars are invited to be keynote speakers, for example: Judith McAra Couper who is about to complete her PhD on the rise of intervention in childbirth, and: Carolyn Young who is interviewing independent midwives who self-identify as having 'burnt-out'. I am their supervisor. My experience is being reinvested back into the profession. As Sally says, to watch the emerging scholars is fantastic.

The huge commitment

New Zealand midwives have come a very long way over the past two decades, but not without a huge commitment. Sally describes a time in her life:

I had this new baby, and I had Oscar who was at kindergarten, and a borrowed computer. I was really struggling with writing. I was the president of the College of Midwives, so I was still traveling, and taking Felix with me around the country to be looked after by midwives everywhere. It was a fairly full-on year. In some ways I sort of regret that I was doing as much as I did that year of having a new baby. (Sally Pairman)

All midwife participants who had done a masters degree are likely to describe it as needing to be squeezed into an already busy life. Sally did her's alongside both a commitment to a new baby and to the new, fledgling College of Midwives (Pair-

man, 1998). Maralyn describes a similar sense of huge commitment:

I think I neglected my children heaps. They got used to me working on the computer all the time. It was not having enough time and space to focus on the study which was probably one of the major things that caused me to have a marriage breakdown. My partner got more and more resistant to me wanting to put another room on the house so I could study in peace, and so I did it all on the kitchen table, and would clear away every night to put the tea out and get it all out again the next day. Um, how did I juggle it? I don't know. By the time I was doing the randomised control trial I'd actually also taken on a job at the hospital as the clinical midwifery consultant... that was my job as well as independent midwifery as well as trying to manage the home. (Maralyn Foureur)

Maralyn juggled research with husband, children, a position of responsibility and a caseload of midwifery clients. My impression is that people like Maralyn, Karen and Sally had such a passion for making midwifery care better for women that they gave every last ounce of time and commitment to the quest, sometimes at deep cost to themselves and their families. Cheryl similarly carried a huge load:

James was born, and he went back to work with me after seven weeks. It was the norm for me. That was pretty tough. I was trying to breastfeed a baby, I'd put him in the childcare centre at the hospital, go and work with the students, run back to feed him, back to the students, teach at the university, you know back and forth. It was pretty exhausting but we survived that and coped reasonably well. About a year after he was born I had this "oh I need to study again". Because you're working academically you're expected to do a masters degree and then go on to a doctorate. (Cheryl Benn)

Cheryl's commitment was as an educator. She felt the pressure to enrol in her PhD, and had the passion to want to do that. Her life was already so busy that it simply meant continuing the pace of 'pretty exhausting'.

My question is: do New Zealand midwives, as a profession, expect the same level of overwhelming commitment from future scholars? If not, where are the scholarships, the funded PhD opportunities that are prevalent in the more established professions to make scholarship a viable career pathway for midwives?

Research and Politics

Maralyn reminds us research is political

Research has to have practical applicability. For me as a midwife, that's fundamental. It's a political activity and you have to be making a difference to childbirth for women. So, how do you teach research—you start with politics, the 'so what', why are you doing this and what contribution are you trying to make to the world and, in our business, to women in particular. (Maralyn Foureur)

Recognising that the amount of midwifery research that will get done in this country is always going to be limited, Maralyn challenges us to remember to think strategically about the questions we ask, and the purpose for which we engage in a process that is costly in time and money. She draws us back to the quest that has been such a powerful driver of the last two decades: to make a difference to the childbirth experience for women. At the same time she shares something of her own battle:

I've applied for several external grants and been unsuccessful. It's very difficult to get funding. I've applied to the Health Research Council on three separate occasions for grants for projects to do with maternity care. The feedback we get are things like 'this is a beginning researcher who does not have a big enough track record'. (Maralyn Foureur)

Maralyn is a leading midwifery researcher/scholar yet she is decreed a 'beginning researcher' by those who allocate research funds. Our scholarship is so new when competing against medicine, science and a host of other well established disciplines. Yet, without winning large research grants it is very hard to establish the kind of track record funders have come to expect. Further, the favoured randomised controlled trial research method enrolling large numbers of subjects and then introducing an intervention to the experimental group often does not sit comfortably with the partnership model of midwifery practice. Until we win such grants we will not have the funds to offer scholarships to PhD students. In this highly competitive environment the message is to work with an inter-disciplinary team drawing on the expertise of other disciplines. Such strategies, while offering valuable support, also present the danger that the research priorities midwives bring may be sidelined by the interests of the more experienced researchers from other disciplines.

Passion

Having reflected with these participants I believe none of us could have sustained our journey through scholarship if we had not had a passion for the nature of the learning:

I did a Bachelor of Arts degree majoring in Psychology and Sociology and in the first year did Fine Arts and History. It was the most wonderful course. I loved it to the 'nth' degree and that is very much still part of what I like to do, delving into the history of art and architecture. I have an abiding interest in history; and so when I first moved here, I looked at the history of St Helens Hospital here in Wellington. I found a whole cupboard of archives, all of the birth records from 1907 to 1980 were stuffed in a cupboard and people were going to throw them out. And I thought ooh. (Maralyn Foureur)

When this pioneering generation went to university there were few papers (if any) directly related to midwifery. We therefore found ourselves exploring knowledge from a wide variety of other disciplines and bringing those insights back to midwifery. Maralyn has skills in historical analysis that today's students are less likely to acquire. As a profession we need to recognise the value of scholars exploring outside of the domain of midwifery so they can challenge, expand and grow our own knowledge base. When there is passion, scholarship flourishes.

Sally talks about the nature of her experience:

There's been exhilarating moments; total exhilaration when we got the 1990 amendment. When I think about what we've achieved in New Zealand, I think that's incredible; amazing. I was really, really happy when I handed in my doctorate. For me it's always we, what we've done. Each thing is not just one person. I think that Karen is an individual person that none of this could have happened without. I don't particularly feel like that about me. I mean, I think we've all helped the process along the way, but it has been us. (Sally Pairman)

Scholarship and the shaping of New Zealand midwifery have been so closely intertwined for people like Karen and Sally that you cannot talk about one without the other. As a witness to the past two decades I stand in awe of the leadership of Karen and Sally, both have offered extraordinary gifts of 'self' without which New Zealand midwifery would not be where it is today. But Sally is right; they could not have lead without the commitment and support of New Zealand midwives. Her doctorate tells the story of 'us'. It has been an exhilarating, amazing story. Scholarship now holds it as history, telling the story to enable future generations to understand the commitment, struggle and gains of this era of New Zealand midwifery.

But what next? Who will be the scholars of the future?

I don't see the next generation of leaders coming through and that worries me... People get very, very involved in their own lives, their own practice, their own environments, their own sort of analysis of 'this obstetrician' and 'that hospital dynamic'. They can't lift up another level and think 'how does all this work in a bigger picture context?' We don't seem to be developing that ability in people... They're turning their minds to practice. They're not turning their minds to politics. I think that's a challenge for us as a profession, is how we actually get them involved. (Sally Pairman)

As I read Carolyn Young's data of independent midwives who have valiantly struggled to maintain a 24-hour a day, seven day a week caseload I am not surprised that they have no energy for anything more than their practice. The commitment of being an autonomous practitioner who works within the partnership model is huge. It seems the next layer of scholars, such as Carolyn, will bring challenge to the model of practice that emerged from the 1990 winning of independence. As the new tensions emerge that midwives become passionate about, so they too will recognise scholarship as a powerful tool to provide evidence. Perhaps now that scholarship is more established the route to change will find its beginnings in the university and then be translated into political action. Or perhaps those two will always walk hand in hand.

Conclusion

Midwifery scholarship in terms of university qualifications is in its infancy. We have a very short list of midwives with PhDs, research grants, or significant international peer-reviewed publications. Yet consider the commitment, passion and capability of a group of women who had to find their own way, forge a midwifery pathway, support each other and at the same time carry the leadership of the profession in political, practice and education domains. Scholarship has brought credibility by establishing evidence and articulating the knowing. It has equipped midwives with valuable skills of critique and given them the confidence to publish. It has opened doors to new insights. For undergraduate students who sigh at the scholarly expectations of their education, I remind them of

the battles that were fought to ensure they had the opportunity to be regarded as competent scholars able to contribute to the establishment of their own knowledge base as opposed to borrowing knowledge from others.

The rise of midwifery scholarship has been phenomenal over the past two decades. We have proved ourselves more than capable. We have kept closely linked to practice. We have recognised the politically contested nature of knowledge and developed research skills to enable us to produce our own evidence. We have come a long way, but the

journey is far from over. It is for the next generation to stand on the shoulders of those who have gone before and reach higher. In a climate where scholars, who are often in education, hold the tension of needing to teach, practise and research, the Midwifery Council needs to re-consider the expectations related to competency-based practising certificates. In my view a small proportion of the profession needs to be

permitted and supported to make scholarship their priority. History shows that the knowledge that surrounds birth will always be contested. Midwives must be poised to add their voice to each new debate over what counts as truth. It is scholarship that builds a strong foundation for women-focused, politically attuned, midwifery practice. Joan Donley proved that you do not need to be within a university setting to be scholarly, yet for most of us it is the university that equips and lends credibility to outputs. Let us invest time, money, support and encouragement in the scholars of the future, helping them to access the resources that enable scholarship.

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Accepted for publication: August 2007

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BOOK REVIEW

The New Midwifery: Science and Sensitivity in Practice (2nd Ed)

Page, L.A., & McCandlish, R. (2006)

Philadelphia: Churchill Livingstone/Elsevier

ISBN: 100-443-10002-0

Reviewer: Lesley Dixon, RM BA MA
PhD candidate Victoria University of Wellington.
NZCOM Practice and Education Advisor

In their commitment to 'creative questioning' the authors of the second edition of this popular book, ask: Does midwifery care do more good than harm? Is the midwife spending time doing the right things?

As midwives we perceive our role to be working with women and promoting good health. However, the authors and the many contributors of this book discuss the difficulties of working in settings in which the midwife is unable to utilize the full potential of the midwifery role. The book has been organized into three sections. In turn these sections discuss how midwives can develop their roles in practice to ensure that they have a positive relationship with women, work at avoiding harm by using best information/evidence in practice, and have adequate skills to provide effective care and support.

Section One: Transition to parenting and relationships in practice – working with women.

This is the largest section and starts with a discussion by Mary Newburn about what women want

from care around the time of birth. It describes the National Childbirth Trust's campaigns in the United Kingdom (UK) to improve maternity care and ensure that high quality services are available for all women and their families. Maggie Redshaw then outlines attachment theory, and the growth of love and commitment within families. Christine McCourt continues the theme of parental transitions in her chapter which gives an overview of the social and cultural aspects of parenting and theoretical views on adjustment.

It's great to see a chapter by Sally Pairman describing the New Zealand midwifery partnership. Her chapter provides an overview of the development of midwifery partnership within New Zealand and how the Treaty of Waitangi has influenced the cultural, social, political and economic relationships within New Zealand society. The history of New Zealand's maternity service is discussed and how partnership is incorporated into the midwifery relationship.

Nicky Leap and Nadine Edwards co-author a chapter about the politics of involving women in decision making. They discuss the constraints of 'informed' decision-making when the information that is being provided is restricted to what is thought to be relevant by the health professional giving the information. They discuss choice, control, safety and risk as applied within a technocratic culture of maternity care. Practical advice on facilitating rather than steering decision making, real communication and the value of story telling are included in this interesting chapter.

Section Two: Putting science into practice.

The second section discusses evidence based midwifery care. It provides an overview of evidence and discusses the five steps for the use of evidence in practice as previously outlined by Lesley Page in the first edition of this book. This section also provides an overview of finding and appraising research, risk assessment, theoretical or actual, and a discussion of why research is necessary in midwifery.

Section Three: Promoting healthy birth, using midwifery skills and the organization of practice.

A public health perspective on maternity care is the priority for this section of the book. There is a discussion on epidemiology and identifying populations with problems, as well as a look at the UK government's actions aimed at reducing health inequalities. Chapters look at how antenatal care is being used to promote optimal health and what is normal when we discuss normal birth. Practical information is provided for midwives to help and protect normality during birth.

This second edition is a mix of theory and practice discussion designed to enhance a midwife's ability to provide evidence based care. Individual case stories are discussed by the contributors to demonstrate how to evaluate and assess the evidence with the importance of reflection being highlighted as part of the whole process. Whilst this book is targeted to UK midwives and mostly discusses the UK model of midwifery, it is a useful book for any midwife, anywhere in the world, to read.

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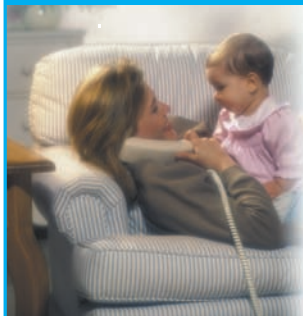
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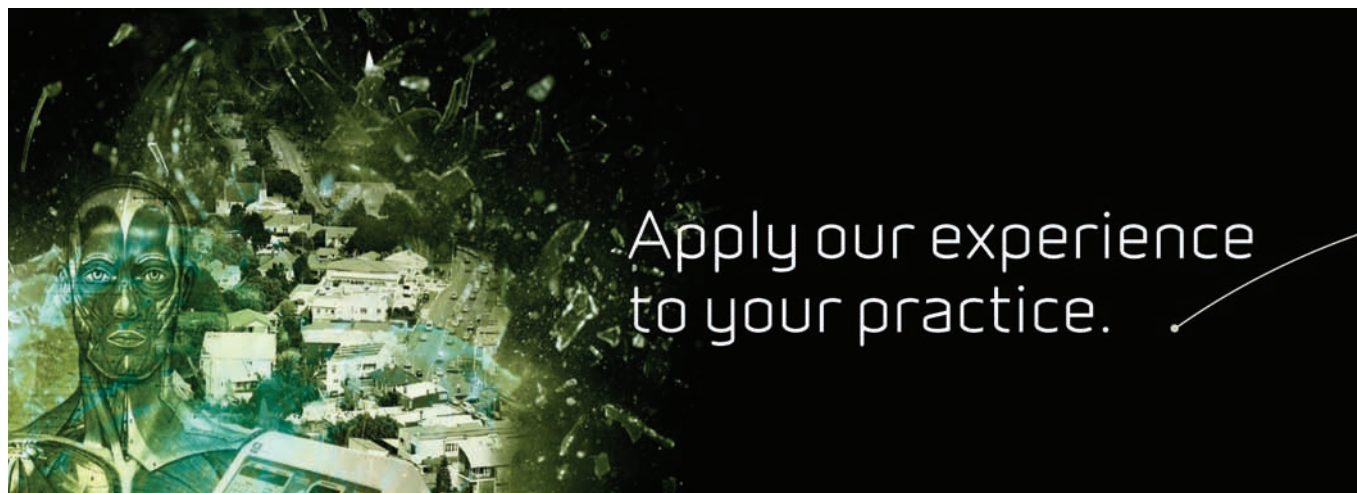
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Pairman, S. (1999). Partnership revisited: Towards a midwifery theory. *New Zealand College of Midwives Journal*, 21 (4), 6-12.

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American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: American Psychological Association.

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