NEW ZEALAND COLLEGE OF MIDWIVES (INC)

JOURNAL

A Midwife Who Knows Me

Midwifery and Assisted Reproductive Technologies

Nuturing the next generation

The Shaping of midwifery education in Aotearoa, New Zealand

JOURNAL 47
June 2013

NEW ZEALAND COLLEGE OF MIDWIVES (INC) JOURNAL

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The NZCOM Journal is published electronically as each paper is ready for publication and published in paper copy in June each year.

The Journal welcomes original research, literature reviews; exemplars/ practice stories/case studies, audits, student, and research methodology articles. In general, articles should be between 500-4000 words. It is important that articles submitted for review, have not been published previously in any form.

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American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

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- Provoke discussion of midwifery issues.
- Support the development of New Zealand midwifery scholarship and research.
- Support the dissemination of New Zealand and international research into midwifery and maternal and child health.

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EDITORIAL

Reflections on evolution

Jackie Gunn

Welcome to the 47th edition of the New Zealand College of Midwives (NZCOM) Journal. This edition marks a milestone in the Journal's history with a move to article based publishing. Last year the College decided that the Journal should change its format from a twice yearly, paper based printed issue, to an electronic article-based publication with an annual printed issue that aggregates the on-line papers.

In today's world there is a wealth of information readily available through the internet for health professionals and women and their families. Many journal publishers are recognising the need to provide faster access to research papers through an on-line service rather than expecting subscribers to wait for a fully printed edition to come in the post.

WHAT IS ARTICLE BASED PUBLISHING?

Essentially it is where each paper is published and disseminated electronically and contributes to an 'issue in progress' as soon as it has been approved for publication. This issue is then printed once it is completed.

There are significant advantages in article-based publication for both authors and readers. Authors do not face long delays in getting their research published, and therefore it is more readily available to practitioners, and readers have access to the latest research as soon as the peer review process is completed. Feedback to the journal editorial board to date suggests that our members are enjoying receiving the Journal articles in their email inboxes. However because not all members have access to good quality (or any) internet access, an annual publication that includes all the articles published on-line in the previous year is necessary. There are also many midwives and libraries who still prefer to have a fully printed paper version of the Journal.

REFLECTING ON THE EVOLUTION OF THE JOURNAL

The NZ College of Midwives Journal has been a feature of College membership since the foundation of the College in 1989 and has been published twice a year since 1989, this is an extraordinary accomplishment.

At the start, the Journal featured many of the practice stories, commentary and information that are now published in the Midwifery News. The 15th issue in October 1996 for example, included one research article by Orma Bradfield, and papers, addresses and the NZCOM president's report from the 1996 National Conference. The content of Issue 15 reflects how little research was being undertaken by New Zealand midwives at that time. The strategic decision taken right at the beginning of the NZCOM Journal's life, that it would publish peer reviewed research of international quality, continues to pay dividends. The vision was, and is, for an internationally recognised midwifery research journal. As this vision developed, and more midwifery research was being undertaken, the NZCOM National Newsletter evolved into the Midwifery News and the Journal became more focussed on publishing research articles as primary content.

One of the quality hallmarks for published research papers is that all the research papers are blind peer reviewed by two reviewers. Peer review means that the papers have been quality reviewed by more than one person on the Journal's review panel. It is a tribute to the quality and commitment of a long line of Journal reviewers that their feedback and support have helped so many authors to publish their papers.

The next milestone was to make the Journal available to a wider group. In 2003 the journal became indexed on the CINAHL (Cumulative Index to Nursing and Allied Health Literature) database which ensured that published papers were listed and available to a wider international audience of researchers. At the same time and due to the development of the NZCOM website journal articles could be accessed electronically with each issue of the Journal available through the College website (six months after initial publication so that members retained primary access as a membership privilege). With the introduction of article-based publication and the DOI numbers the on-line publication has now reduced to 3 months. Additionally as a means of increasing the Journals' international visibility, listing in other databases is currently being explored.

Over the years, passionate and committed midwives have served the Journal extremely well as editors. Their commitment and passion has ensured the continuous evolution (and publication!) of the NZCOM Journal. Editors ensure that papers are reviewed and prepared for publication, and put each issue to the publishers. The College of Midwives owes its editors a great debt for their commitment to the Journal and the College's vision for it. Helen Manoharan, from Palmerston North, was the original editor for a number of years. She was followed by the editorial board from Otago Polytechnic Midwifery School of Alison Stewart, Rhondda Davies, Deborah Davis, Jean Patterson and Sally Pairman. Joan Skinner from VUW, Graduate School of Midwifery, held the position next. She was joined by Lesley Dixon from NZCOM national office who manages the secretariat work for each issue. The current editors, Lesley Dixon and Andrea Gilkison, from AUT University, Dept. of Midwifery, with the editorial team follow very capably in their predecessors' footsteps.

Looking back over the course of more than 25 years that I have been involved in midwifery education and research at AUT University, it is wonderful to see how both midwifery and midwives' research capacity has evolved. In 1989, midwifery education was on the threshold of transition from hospital based, task focused training, to tertiary education based, and research focused education for practice. The evolution of degree level preregistration programmes and more latterly, post graduate midwifery education opportunities has resulted in the continuing development of research-capable midwives. The midwives who have embraced on-going midwifery education and research are tomorrow's leaders, educators and researchers. The recent advent of funded postgraduate education for midwives has given another boost to capacity building for the future.

The profession must always be preparing people for the future which is a theme reflected in this issue. The changing face of education is the focus of Andrea Gilkison's paper which maps the many extrinsic and societal factors that have influenced midwifery undergraduate education in New Zealand. It is always important to know our history when we are making changes and preparing for the future. In the same vein Liz James has examined the experiences of a small group of midwives who have worked with third year midwifery students. By exploring the relationship between the midwife and the student Liz found that a positive trusting relationship was central to the learning experience for both. In many ways this mirrors the partnership relationship that underpins midwifery practice and supports women's preparation for parenting. Women who have become pregnant following assisted reproductive technologies are the focus of a literature review undertaken by Lynley Allot and colleagues who have identified the issues midwives need to consider when providing care for these women. While the importance of the midwife 'knowing' the woman is highlighted by a small group of university students in Lisa Newicks paper which used focus groups to identify student views about midwifery and maternity services.

The Journal is at a turning point in its development. The number and quality of papers being submitted for publication is steadily increasing as New Zealand based midwifery research increases. There is a healthy number of papers in the review pipeline, so keep an eye on your inbox. The Journal has always encouraged midwives to send papers for publication and it is exciting to see the expansion of local midwifery research reflected in the papers being submitted.

NEW ZEALAND RESEARCH

A Midwife Who Knows Me: Women Tertiary Students' Perceptions of Midwifery

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ABSTRACT

There is little information about how young women view midwives and the maternity services yet they are the future potential consumers of maternity services. How their expectations are formed is important. This study of young female university students has explored their understanding about midwives and maternity care. Two small focus groups involving eleven undergraduate women were held to discuss midwifery and maternity services. Qualitative thematic analysis was used to identify three overarching themes. Firstly, there was a perception of midwives as providing a highly personalised and professional service but that particular social qualities were also necessary. Secondly,the midwifery partnership model of practice was found to be embedded in the women's understanding of the maternity system. Lastly, storytelling from friends and relatives was found to be the main source of the construction of these young women's perceptions. Storytelling was considered a trustworthy source of information and privileged above media representations. Employing the power of personal storytelling is a strategy that may be useful when seeking to connect with young women who are future potential users of midwifery and maternity services. This strategy could support and improve knowledge and understanding of the New Zealand/Aotearoa midwifery and maternity services.

KEY WORDS

midwifery, continuity of care, undergraduate students, storytelling, maternity care.

INTRODUCTION

Two decades ago, the introduction of the midwifery partnership model in New Zealand/Aotearoa was a world-leading initiative. Within this model, midwives work as autonomous health practitioners seeking to empower women as experts in the natural and normal process of pregnancy and birth through a power-sharing partnership (Guilliland & Pairman, 2010). More recently, a media backlash has undermined midwives and their professional credibility (Chisholm, 2011; Exton, 2008; Guilliland & Pairman, 2011; Haines, 2009). In response, as the professional organisation and recognised voice of midwives, the New Zealand College of Midwives has been considering optimal ways of publicly disseminating accurate information about midwifery and maternity services.

Maternity care in New Zealand is fully government funded for all resident, eligible women, who can choose a Lead Maternity Carer (LMC) to co-ordinate and provide maternity services. An LMC can be a general practitioner, an obstetrician, or a midwife (Ministry of Health, 2007a).The majority of New Zealand pregnant women (78%) choose a midwife to provide their LMC services and gain continuity of care from the one health care professional, from early pregnancy to six weeks postpartum (Ministry of Health, 2007b). In many aspects, the New Zealand midwifery partnership model is woman-centred and differs from maternity service models found in other countries.

There is little research exploring the understanding and perspectives of young women about midwives and maternity services. One study was found involving American university students enrolled in a Maternal Child Health course, which analysed anonymised online discussions about midwifery (DeJoy, 2010). Despite having access to core readings on midwifery training and practice, these students associated midwives primarily with homebirth and unsafe practice.

An Australian study found that while pregnant participants clearly understood that midwives were qualified to provide full maternity care, many women still requested a doctor at birth (Leen Ooi Boon, 2004). An American study found that pregnant women's beliefs about childbirth influenced their choice of health professional. Women who saw birth as normal and natural tended to select a midwife. Those who perceived birth as in need of medical assistance chose an obstetrician (Howell-White, 1997). In the United Kingdom, mothers enrolled in one study were interviewed at several points during pregnancy and following the birth, and reported that midwives were their preferred maternity health professionals (Fraser, 1999). Consumer surveys in New Zealand have demonstrated consistently high levels of satisfaction with the LMC model of maternity care (Health Services Consumer Research, 2008; Ministry of Health, 2012). The 2011 consumer survey identified the highest level of satisfaction (89%) when the LMC was a midwife.

In both America and Australia, midwives are concerned that inaccurate public understandings have a negative impact upon the midwifery profession (Brodie, 2002; Foley, 2005). The need for public education to improve knowledge about midwifery care was identified. Kimberly

Kline (2007) analysed midwife-attended birth representations airing on prime time American television. She found that midwives were portrayed as controlling, and an irrational choice of maternity health carer. In New Zealand there have been several media reports that depict maternity care as problematic, with midwifery as the cause (Chisholm, 2011; Exton, 2008; Haines, 2009). This is despite the overwhelming consumer satisfaction outcomes and comparable perinatal mortality to the United Kingdom (UK) which has a similarly high quality collection of perinatal mortality data (Perinatal and Maternal Mortality Review Committee, 2012).

The aim of this research project was to explore the perspectives of a small group of female university students about midwifery and maternity care in New Zealand. This research was undertaken by a third year Bachelor of Arts student at the University of Canterbury and mother of two, supported by the New Zealand College of Midwives. The research project had Human Ethics Committee approval under the University of Canterbury internship programme.

METHOD

Focus groups were chosen as the most useful method to generate in-depth talk among groups of young women around the topic of midwifery. At Canterbury University, young female students of social sciences were recruited through presentations before lectures, online invitations to take part, direct approach, and word of mouth. All participants were given an information sheet and consent forms to read and sign. Two focus groups were facilitated using a discussion guide, which supported open conversation (Box 1). The first focus group consisted of seven participants which included a mother with recent experience of maternity services. No one else in this group had attended a birth. The second focus group consisted of four participants, three of whom had attended a birth in a support role. To stimulate dialogue towards the end of the second focus group, the facilitator introduced a *North & South* magazine cover, current at the time, which was representative of negative media portrayal of midwives (Chisholm, 2011).

Discussion Guide

- Maybe pregnancy and childbirth are not too important to you at the moment, but we all have ideas about pregnancy and childbirth and I am interested in what you know.
- Does anybody have a friend or relative who is pregnant or become a parent recently? Can you tell us about that?
- What have you seen or read about pregnancy?
- We are hearing about midwives…when you think about a midwife, what comes to mind?
- Can anyone describe the role of a midwife? What have you seen or read about midwives?
- What do you think the advantages of having a midwife are? And disadvantages, if any?

Transcripts were analysed thematically (Braun & Clarke, 2006) for both understandings of midwifery, and how those meanings were co-constructed. To protect the participants' identities, pseudonyms were used in the text. A feminist social constructionist approach was used (Kitzinger, 1994; Wilkinson, 1998). Three major themes, with subthemes were identified (Table 1), all of which are linked to, and reinforced by, the others.

FINDINGS

PERCEPTIONS OF MIDWIVES

Personalised service

Participants articulated personalised care as an essential part of a midwife's professional services. There was an understanding that antenatal, intrapartum and postnatal care would be provided by the same midwife throughout. This long period of time would support the development of a deep familiarity – a client would know the midwife but also the midwife would know her. It was expected that this familiarity included knowledge of the woman's background, medical history, and emotional needs:

> *If I was thinking about having a child, I'd definitely want a midwife who understood what I wanted and my needs. I think it's quite important to have that belief that they're going to do what you want and support you in the way you need to be supported* (Jane).

A midwife was perceived as being familiar with a client's personal beliefs, needs, and wants around pregnancy and birth, and as actively supporting these as well. The expectation of a supportive midwife also included active communication around education, informed decision-making and advocacy, to ensure the woman's specified needs and wants were met:

> *I think that women who are pregnant or give birth should be given all information that is possibly available, all options and then whatever they decide, that should be okay…I mean, as long as the client, the woman, is well-educated to make that decision, then that's the support she should get* (Jade).

Midwives were expected to be unequivocally available for births. Some stories detailed birth experiences that were seen to be negatively compromised because the LMC midwife was not available and a backup midwife attended. The Section 88 contract of service specifications for LMC care requires that the LMC or a backup LMC is available 24 hours a day, seven days a week. LMC midwives have an arrangement with another LMC midwife to provide support and back up to their caseload during time off. This arrangement was constructed by participants as adversely affecting the birth experience:

> *My sister went into labour early, and the midwife wasn't available and so she had to talk to another one. That midwife said "Ohh, just have a bath, you'll be fine". My sister goes through so much pain all the time – she has quite a high threshold of pain tolerance and the other midwife knew this. At 11 o'clock at night they ended up taking my sister in, and they were "Oh my goodness you're seven centimetres dilated" and apparently that's when most women are screaming. And the other thing was my nephew was, do they call it breech, he was round the wrong way. So if it had been like another hour or whatever, well both my sister and he would have died. So, not having the right midwife caused all that havoc* (Laura).

The lack of an existing familiar relationship was framed as contributing to increased danger. Jade, the only participant who had given birth, shared a story with similar concerns about a backup midwife:

> *When I couldn't have my proper midwife there and had to have a backup one instead, I was absolutely distraught. I hadn't had much to do with this other woman* (Jade).
> *She didn't understand your background* (Emily).
> *She didn't really know anything about me* (Jade).

Table 1

Perceptions of Midwives	*Perceptions of the Maternity System*	*Construction of Perceptions*
• Personalised Service	• Midwives as the Lead Maternity Carers	• Storytelling and Second-hand Experience
• Professional Expertise	• Birthplace Understandings	
• Social Qualities	• Birth and Risk	• Media Representations

And you don't know her either. It's like some stranger in the room (Sophie).
Exactly (Jade).
It's a difficult time as well to have a stranger there (Lydia).

These discussions suggest that women want the midwife 'who knows me' available for labour and birth, to contribute to feelings of safety and support. Because the backup midwife did not 'know the woman', personalised midwifery care was seen to be disrupted. While participants did not always expect to control birth timing, they did expect to control who was at the birth. The unpredictable timing of births was discussed as part of the midwifery job description and that midwives had to find a way around that potential dilemma within a caseload, to be available for the birth. That the backup midwife was part of the solution to this issue was not well understood.

Professional Expertise

Experience and knowledge were discussed as being important qualities for a midwife. A high level of experience in terms of having attended many births was linked to expert knowledge. That midwives 'knew what they were doing' was understood as promoting a positive level of reassurance for the woman:

To have somebody who is knowledgeable and has experience in those kind of things, who can provide you with that and make you feel comfortable and assure you about the situation, is important (Emily).

Within personalised midwifery care and support a woman is empowered as the expert in knowing what is best for her. At the same time, the midwife is positioned as specialising in pregnancy and birth. Below, Jane describes attending a birth where both the midwives and the birthing mother saw themselves as the predominant expert:

She was pretty clear that she didn't want any assistance, she didn't want any drugs and she didn't want any gas even, and there came a point where they were trying to make her have gas and …she's pretty stubborn so she didn't but I could see how easily you could? And I found that quite interesting, that there was this perception of what was going to be best for her regardless of what she really felt, even though she was the one experiencing it (Jane).

Social qualities

Participants noted a range of social qualities that enhanced the professional proficiency and individualised service that midwives brought to the relationship. One participant preferred a no-nonsense approach while another desired a sensitive concern for emotional wellbeing. For most participants, it was important that midwives have empathy and the 'care factor':

I think it's someone who is able, especially if it's your first child – even though they've seen it a hundred times – to be able to have empathy with what you were going through for that first time (Jane).

Some participants shared narratives in which midwives were framed as insensitive and without a consistently empathic approach. In the situation below, the midwife made a negative remark which remained in the woman's memory long after midwifery care had been completed. The woman shared her experience with family and friends which contributed to an adverse view of that midwife:

My sister, when she was having her child, she was nineteen, she had really bad endometriosis and polycystic ovaries, and she was like "Well I'm going to have to get a hysterectomy". The midwife said "Oh, don't do that. What if something happens to your son, what if he gets run over and killed?" My sister has had a hysterectomy now, she didn't really have a choice. She's got one child, she can never have another one. And it's just stuck with her, what that midwife said. That midwife just was not thinking, especially how that would psychologically affect my sister (Liz).

PERCEPTIONS OF MATERNITY SERVICES

Midwives as *the* Lead Maternity Carers

Midwives were accepted as the predominant option for a Lead Maternity Carer (LMC) within the New Zealand maternity system. In all the birth stories shared, midwives were talked about:

Everyone I know has had a midwife...so I see it as being part of what people use, when they have children in New Zealand (Jane).

No birth stories mentioned doctors. Doctors were only referred to as being potentially present at births, and no more than that:

You'd probably get more experience from a midwife, maybe, of the bigger picture of childbirth. Before and after. As opposed to a doctor who might be more surgically oriented, maybe. Just looking at the birth, then off you go (Fiona).

Birthplace understandings

Birth stories were shared about midwives facilitating births at home, in birthing units, and in hospitals. Many hospitals in New Zealand transfer women to primary units for postnatal care, or discharge them home within 48 hours of the birth. While midwives were positioned as advocating for mothers against hospital demands to leave, concerns were raised about hospital services moving new mothers out too quickly:

Lots of people talk about places like (Name) Hospital and getting booted out of there real fast. They just want to flick you out straight away, which is dodgy because then you hear about people having complications after they get home. And they don't know what to look for, what's right and what's wrong and you're putting them, the baby and mother, in a dangerous position and they seem to be all about turnover and not care (Emily).

This perception that women were discharged from hospital too early, contributed to fear and worry that new parents were under-supported by maternity services at a crucial time. There was not a clear understanding that some secondary/tertiary hospitals transfer new mothers and babies to primary units for postnatal recovery and support.

Birth and Risk

In this study, birth was linked to risk. While acknowledging risk, the narratives below also describe positive perceptions of birth. They identify birth as turning out 'all right' with midwifery expertise and medical technology on hand if needed. These views came from the second group of four participants, including three women who had the experience of being at a birth as support people:

But you know, actually, what can go that wrong really? Like if you've got the backups there as well, I think it would be good. Oh, I think I'd be alright (Anna).

I think, with like the precautionary principle where "you must go to the hospital just in case anything goes wrong," but for the most part things don't go seem to go wrong (Fiona).

Other participants shared a perception of birth as potentially dangerous. This was more prevalent in the first focus group where none of the women had attended a birth, except a mother, Jade:

You have to trust that midwife knows what they're doing and so you're putting a lot of trust in someone and [they] have to know what they are doing because if there are complications, it's life and death (Andrea).

These discussions reveal contradictory views around birth and risk. Birth was seen as dangerous and unpredictable, alongside a perspective of birth as a positive experience, despite risk.

CONSTRUCTING PERCEPTIONS

Storytelling and second hand experience

Perceptions about pregnancy, birth, midwives and maternity care were constructed through the sharing of stories. The stories related to direct birth experience and second-hand experience. No one referred to any formal information such as books, leaflets or websites. In these dynamic

discussions, participants enacted the social interaction that was the primary source of information about midwifery care within this context – word of mouth:

> *I was on the phone all the time trying to find someone to be my midwife. And now all of my friends, who have heard my experience, anytime they are pregnant, that's it, they are on the phone* (Jade).

That word of mouth was the main source of information about midwives was consistently reinforced. Jade's first-hand account of childbirth influenced the discussion within that focus group. The other participants privileged her experiences as expert. As a result, they articulated examples of turning points, where some young women seemed to change their minds and construct new meanings in response to the perceived credibility of storytelling:

> *From both my experiences of being in the hospital, it's not the midwives, it's the hospital staff who are really eager to get the women out of the door* (Jade).
> *It's horrible, if people get kicked out early? What will they do?* (Andrea).
> *I'm pretty sure if I had had a baby for four hours, and I was worn out, I'd be thinking "what the hell have I got myself in for?"* (Ellie).
> *It already puts me off having children* (Emily).

The sharing of second-hand stories by participants also indicated that new mothers have a desire to tell their stories of pregnancy, birth, midwifery care, breastfeeding and new motherhood, including the good and the bad of it:

> *I've got a couple of friends who have just had babies recently and they have both talked about this whole, kind of, innocent, pure, naïve vision that most people have. And then the nitty-gritty of it, and they appreciated having someone to talk to about the nitty-gritty, the crappy parts about being pregnant and the hard stuff about giving birth* (Jane).

Media Representations

Participants talked about media representations of pregnancy and birth in fictional movies and television shows, celebrity accounts from popular women's magazines, or from the internet. This talk was prompted by the facilitator with the question "what have you seen or read about pregnancy and birth?" There was talk of how these life events are often depicted as wonderful and hassle-free. However, participants were quick to dismiss these representations as inaccurate in the context of real life pregnancy and birth:

> *You always see celebrities say that pregnancy is the best time of their lives* (Andrea).
> *Then you hear people and they say, "That was the most horrible six hours of my life"* (Ellie).
> *Six hours? But what about 36 hours?* (Sophie).

To stimulate talk in one of the focus groups the then current issue of a national magazine with a cover story criticising midwifery care was introduced late in the discussion. The group read the cover as being deliberately shocking. Participants were critical of the headline of "the myth of natural childbirth" and stated they considered that birth was a normal and natural event:

> *Obviously it's a natural event and I think that's the thing with midwives in New Zealand, in that it doesn't have to be all about doctors. It can be about midwives* (Anna).

DISCUSSION

While these findings cannot be generalised, the perceptions of midwifery identified in this small group suggest that the midwifery partnership model is embedded in the New Zealand maternity system. Participants were very aware of women-centred care from midwives. Many understood that the client/midwife relationship was based on shared power and familiarity. This included an expectation of a supportive midwife, prepared to respect both the philosophical beliefs and clinical preferences of the client.

Continuity of caregiver was also well understood. This included the framing of 'my midwife' as consistently available. It was not enough for a woman to know her midwife – the emphasis was placed on a midwife 'who knows me', particularly at the birth. The same understanding did not extend to the role of the backup midwife. This was based on a concern that the backup midwife would not have sufficient knowledge about the woman to provide safe and appropriate care. It can be suggested that uninterrupted continuity of care from the same LMC was viewed not just as essential but as a right. From this small amount of non-generalisable data there may be a lesson for some midwives, to review their practice and consider how they can ensure that the backup midwife has a more visible and meaningful contact with women prior to birth to establish a relationship, in the event that the LMC is not available.

This discussion indicates the very high, and some may argue, unachievable and unsustainable expectations participants placed on midwives. Midwives are perceived to provide highly individualised care, based on expert knowledge and experience, all delivered in an unfailingly available, accommodating, friendly and sensitive manner. This demand for non-negotiable, individualised care may be attributable to the characteristics of Generation Y, an age-related term which applied to these research participants. It could be argued that Generation Y is assertive, with a sense of entitlement and accustomed to highly personalised consumerism (Twenge, 2007).

The differences between midwifery care and that of doctors were understood. The perception of midwives as experienced in practice and clinically knowledgeable meant that midwives were seen as professionally accountable as well. One implication of midwives being seen as both autonomous and liable, is that they are held as fully and individually responsible for births, particularly those that lack an optimal outcome.

Birth and risk were linked. There were competing and contradictory understandings of birth as dangerous, and of birth as a normal and natural event. This suggests that midwives in New Zealand who practise within the midwifery partnership model may care for women who view birth within contradictory framings. What was noticeable was that while pregnancy and birth were acknowledged as potentially physiologically risky, this was also an emotionally important and special time in a woman's life, demanding specialised and supportive midwifery care. There was less clarity around the maternity system, with some confusion over the provision of immediate after-birth care for mothers and babies. This uncertainty may be explained using Maria Zadoroznyi's argument (cited in Leen Ooi Boon, 2004) that the workings of the maternity system become visible only when a woman directly experiences midwifery care, including knowledge of the role of the backup midwife.

Other than direct experience of birth, knowledge about midwifery was generated through social interaction. Participants privileged stories of direct experience and second-hand accounts of pregnancy and birth. Kline (2007, p. 20) reinforces the social nature of such information in her statement that "the experiences of pregnancy and childbirth engender expectations, desires and concerns; thus women seek advice and guidance from others with experiences and knowledge." Word of mouth was seen as a credible source of knowledge about midwives, while no formal information sources were named. However, negative perceptions of maternity care based on individual experiences seemed to be extended to apply to midwifery and maternity services in general. This supports the idea that public perceptions of midwives and midwifery are engendered rather than understood (Guilliland & Pairman, 2011).

Word of mouth and experience of birth were more influential than media depictions in forming perceptions of midwifery. This can be seen as a positive sign for the midwifery profession. Critical media representations may not negatively influence perceptions of midwives that young women have, for two reasons. Firstly, in this study many participants were able to thoughtfully challenge media depictions, maybe because they were undergraduate students. Secondly, such reports are not necessarily of current interest to this age group (Zadoroznyi cited in Leen Ooi Boon, 2004). This was true in respect to the magazine cover introduced in the second focus group. All the women disregarded it as sensationalist, and were previously unaware of that particular cover, article and debate.

Participants in this study had many second-hand stories to share about pregnancy and birth, which suggests that mothers do talk about birth experiences. In New Zealand, midwives provide consumer feedback forms to their clients so that both positive and negative feedback can be provided. This feedback mechanism helps midwives to reflect on their care and supports sensitivity and improved understanding of the woman's perspective. Some women however, may retain negative criticism for word of mouth settings which do not include the midwife or midwifery profession such as conversations, online blogs, or other social media.

Recommendations to support improved understanding

As an appropriate medium through which to engage with the current generation of potential clients and new mothers, the internet may provide an opportunity to spread relevant information about midwifery care. Harnessing the power of storytelling is a useful tool in rectifying knowledge deficits and reinforcing positive perceptions of midwives. Storytelling has a long tradition in education. Carol Haigh and Pip Hardy (2010, p. 410) explain that "storytelling has been used both to engage service users and to transmit health messages". A suggestion for public education around midwifery and maternity services is the use of relevant, real-life stories in short multi-media clips. These 'digital stories' have been found to be powerful in raising awareness in health disciplines (Kirk, Tonkin & Burke, 2007; Haigh & Hardy, 2010). Involving people of influence is critical for success in delivering the 'message' (Kirk *et.al.,* 2007). In this context, real-life personal narratives from new young mothers with positive experience of LMC care could be useful.

Limitations

This research has been a small qualitative explorative study and cannot be generalised to all young tertiary students. As with all research of this nature, the meanings interpreted could be read differently by other researchers.

CONCLUSION

One of the authors, Guilliland, has argued that "midwives in New Zealand have come to acknowledge the pivotal role the consumer plays in the protection of their profession" (1989, cited in Guilliland & Pairman, 2010, p. 16). By engaging with future potential consumers, we have explored how a small group of tertiary students view midwifery and maternity services.

Findings show that the participants had high expectations of a midwife 'who knows me', including individualised care, empathic understanding and support, and active communication. LMC midwives were unrealistically expected to be always available for labour and birth. Backup midwives were considered negatively and as potentially contributing to safety concerns owing to a lack of shared familiarity, and in-depth knowledge of the woman's history and pregnancy.

Midwives were acknowledged as both professionally knowledgeable and accountable. Participants clearly understood the partnership model of midwifery practice as embedded within the New Zealand maternity system. This included shared power and continuity of care. Midwives were positioned as the main option for LMC care within the New Zealand maternity system. However there was some confusion about maternity services themselves, and in particular, a perceived lack of post-birth hospital support.

Great importance was placed by participants on the experiences of their friends, family and others to co-construct perceptions of maternity care and midwifery. They identified these storytelling accounts as influencing their choice of birthing support. No formal sources of information about midwives or maternity care were named. Significantly, participants demonstrated the ability to thoughtfully challenge critical media representations of birth and midwives.

Employing the power of personal story telling within digital social media is a possible platform with which to currently connect with young women. This suggestion combines well with the existing education efforts of the New Zealand College of Midwives. Together they can contribute towards a public education initiative of improving knowledge of midwifery among young women, the potential future clients of midwives. As a result, the midwifery profession may be further strengthened and validated here in New Zealand.

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REFERENCES

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3, 77-101.

Brodie, P. (2002). Addressing the Barriers to Midwifery – Australian Midwives Speak Out. *Australian College of Midwives Incorporated,* 15, 5-14.

Chisholm, D. (2011). A Failure to Deliver. *North & South.* August 2011, 39-51.

DeJoy, S. B. (2010). "Midwives are Nice, But…": Perceptions of Midwifery and Childbirth in an Undergraduate Class. *Journal of Midwifery and Women's Health,* 55, 117-123.

Exton, L. (2008). *The baby business: what has happened to maternity care in New Zealand?* Nelson: Craig Potton.

Foley, L. (2005). Midwives, Marginality and Public Identity Work. *Symbolic Interaction,* 28, 183-203.

Fraser, D. (1999). Women's Perceptions of Midwifery Care: A Longitudinal Study to Shape Curriculum Development. *Birth.* 26, 99-107.

Guilliland, K. & Pairman, S. (2010). *The Midwifery Partnership – A model for practice.* Second Ed. Christchurch: The New Zealand College of Midwives.

Guilliland, K. & Pairman, S. (2011). *Women's Business: the story of The New ZealandCollege of Midwives 1986-2010.* Christchurch: New Zealand College of Midwives.

Haigh, C. & Hardy, P. (2010). Tell me a story — a conceptual exploration of storytelling in healthcare education. *Nurse Education Today.* 31, (4), 408-411.

Haines, L. (2009). Another unfortunate experiment? *Listener.* Issue 3586, 31 January 2009.

Health Services Consumer Research (2008). *Maternity Services Consumer Satisfaction Survey Report.* Auckland Health Services Consumer Research.

Howell-White, S. (1997). Choosing a Birth Attendant: the Influence of a Woman's Childbirth Definition. *Social Science and Medicine,* 45, 925-36.

Kirk, M., Tonkin, E. & Burke, S. (2007). Engaging Nurses in Genetics: The Strategic Approach of the NHS National Genetics Education and Development Centre. *Journal of Genetic Counselling.* 17, 180-188.

Kitzinger, J. (1994). The methodology of Focus Groups: the importance of interaction between research participants. *Sociology of Health and Illness,* 16,(1),103-121.

Kline, K. (2007). Midwife attended births in prime-time television: Craziness, controlling bitches and ultimate capitulation. *Women and Language,* 30, (1), 20-29.

Leen Ooi Boon, C. (2004). Primigravidas' perception of the role of a midwife. *Australian Midwifery: Journal of the Australian College of Midwives.* 17, 26-31.

Ministry of Health (2007a) *Maternity Services: Notice Pursuant to Section 88 of the New Zealand Public Health and Disability Act 2000.* Wellington: Ministry of Health.

Ministry of Health (2007b). *Report on Maternity: Maternal and Newborn Information 2004.* Wellington: the New Zealand Health Service.

Ministry of Health (2012). *Maternity Consumer Survey 2011.* Wellington: Ministry of Health.

Perinatal and Maternal Mortality Review Committee (2012). *Sixth Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality 2010.* Wellington: Health Quality & Safety Commission.

Twenge, J. (2007). *Generation Me: Why today's young Americans are more confident, assertive, entitled – and more miserable than ever before.* New York: Free Press.

Wilkinson, S. (1998). Focus groups in feminist research: power, interaction and the co-construction of meaning. *Women's Studies International Forum,* 21, (1), 111-125.

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Newick, L., Vares, T., Dixon, L., Johnston, J., Guilliland, K. (2013). A Midwife Who Knows Me: Women Tertiary Students' Perceptions of Midwifery. *New Zealand College of Midwives Journal,* 47, 5-9. DOI: http://dx.doi.org/10.12784/nzcomjnl47.2013.1.5-9

PRACTICE ISSUE

Midwifery and Assisted Reproductive Technologies

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ABSTRACT

Assisted reproductive technologies (ARTs), particularly in vitro fertilisation (IVF), are being used by women who are experiencing difficulties of conception to achieve parenthood. Many of these women and their partners will come to midwives for their maternity care. In this paper we examine the literature regarding the health and wellbeing of women who have used assisted reproductive technologies, and their babies. Our paper aims to provide an overview of fertility/infertility, and to highlight the adverse maternal and perinatal outcomes associated with ART pregnancies. We aim to inform midwives of the issues which they need to be mindful, when caring for these women and their families.

KEY WORDS

Midwives, Assisted Reproductive Technologies, In Vitro Fertilisation, pregnancy, birth.

INTRODUCTION

Women and their families who are experiencing difficulties in conception turn to assisted reproductive technologies (ARTs) to help them conceive. A significant number of women, once they become pregnant through ARTs, are approaching midwives to provide care for them as Lead Maternity Carers (LMCs). Pregnancies following ARTs might or might not be straightforward; the underlying reduced fertility condition, the drugs and the procedures involved may threaten maternal and neonatal wellbeing. This paper aims to provide an overview of fertility/infertility, and to highlight the adverse maternal and perinatal outcomes associated with ART pregnancies.

FERTILITY AND INFERTILITY

The World Health Organisation defines infertility as the inability to conceive a child (http://www.who.int/topics/infertility/en/). A couple may be considered infertile if, after two years of regular sexual intercourse, without contraception, the woman has not become pregnant (and there is no other reason, such as breastfeeding or postpartum amenorrhoea). Infertility has a significant emotional and psychological toll on those who experience it, and has been described as a life crisis (Evers, 2002; Paterno, 2008).

Over eighty percent of couples who are under the age of forty will conceive within the first year of regular, unprotected intercourse (NICE, 2013). Of those who do not, about half will conceive within the second year. Both men and women experience infertility at similar rates with about 20% of all cases being of unknown etiology or a combination of both male and female factors (Paterno, 2008). Factors that have been identified as causing infertility have been ovulatory factors, e.g. polycystic ovarian syndrome (present in about 20% of couples), utero-tubal, peritoneal factors, e.g. endometriosis, pelvic inflammatory disease (present in 30% of couples), semen migration factors, e.g. sperm immotility (10% of cases) and male factors, e.g. low semen count or poor semen quality (30% of couples).

It is estimated that 1-4% of all conceptions are due to ARTs. To some extent this is reflective of an older population of women, who have delayed childbearing until their fertility is already declining (Evers, 2002; Halliday, 2007). To illustrate the effect of maternal age on fertility in relation to IVF: for women aged 45 years or over the live birth rate per embryo transfer cycle was 0.5%; for women aged 40 – 44 years it was 9.0% and for women aged less than 30 years 35.9% (Wang, Chambers & Sullivan, 2010).

The Assisted reproductive technologies (ARTs) that are available in New Zealand are: In –Vitro Fertilisation (IVF), egg donation, sperm donation, intracytoplasmic sperm injection (ICSI), and, more recently, embryo donation. Since 2005, New Zealand women, accessing publicly funded IVF treatment, are restricted to single embryo transfer (SET) rather than multiple embryos (Murray, Hutton & Peek, 2005). Fertility clinics are located in five of New Zealand's main cities and several clinics offer satellite services in other urban centres. Thus women living in rural and other areas without fertility clinics are required to travel, sometimes long distances, to access fertility treatments and laboratory services.

Most fertility clinics offer privately funded and/or publicly funded IVF cycles. However, women need to meet specific criteria to qualify for publicly funded cycles of IVF. These criteria include: women who are unlikely to spontaneously conceive; women less than 40 years old; women with a body mass index < 32 kg/m2, and non-smokers. While the latter three are now well known to improve IVF outcomes, the success of IVF can continue to be compromised by other factors such as duration of infertility and the processes and protocols that dictate the fertility clinic's practice.

MATERNAL OUTCOMES AFTER ART

In comparison to spontaneous conceptions, the risk to maternal health is increased in ART pregnancies (Jackson, Gibson, & Wu, 2004; Sutcliffe & Ludwig, 2007) with spontaneous abortion, gestational hypertension, and pre-eclampsia having been identified as the main potential risks. It is important to note that it remains uncertain as to whether these risks

are linked with the couple's underlying infertility factors, medical factors, maternal age, obesity or the ART processes themselves (Mukhopadhaya & Arulkumaran, 2007). For example, Chen et al. (2009) in their retrospective Canadian study found that pre-eclampsia occurred more frequently in women who had conceived through IVF than in women who had conceived through two other ARTs: ovulation induction or intrauterine insemination. Thus, women undergoing ART appear to have a significantly increased risk of gestational hypertension and pre-eclampsia, especially following an IVF conception.

In addition, while the exact cause is unknown, the couple's subfertility factors appear be to linked to an increased incidence of pre-eclampsia (Sutcliffe & Ludwig, 2007). Furthermore, a two fold increase in gestational diabetes mellitus is seen in women undergoing ART, which may be associated with the underlying cause of infertility, e.g. polycystic ovarian syndrome (Mukhopadhaya & Arulkumaran, 2007).

The incidence of placenta praevia is also significantly increased in both IVF and ICSI assisted pregnancies, as embryos are more likely to implant in the lower segment owing to placement position on embryo transfer (Hayashi & Nakai, Satoh & Matsuda 2012; Kallen, Finnstrom, Nygren, Olausson & Wennerholm, 2005; Nygren, Finnstrom, Kallen & Olausson, 2007; Poikkeus, Gissler, Unkila-Kallio, Hyden-Granskog, & Tiitinen, 2007; Sazonova, Ka¨llen, Thurin-Kjellberg, Wennerholm & Bergh, 2011).

In New Zealand, the single embryo transfer (SET) policy has significantly reduced the risk of multiple births and their associated high risk of complications for the babies, mother and society (Murray, Hutton, & Peek, 2005). Multiple pregnancies are a well-recognised risk of ART treatments. These have the potential to increase complications in relation to perinatal outcomes and to the mother during pregnancy. Maternal complications are at least twice as common in multiple pregnancies, with increased incidence of anaemia, hypertension including pre-eclampsia, premature labour, haemorrhage and operative birth, including caesarean section (Gambone, 2006; Halliday, 2007; McDonald, Murphy, Byene & Ohlsson, 2005). Twins born after ART have an increased incidence of complications compared to those naturally conceived (Murray et al, 2005).

PERINATAL OUTCOMES AFTER ART

Perinatal outcomes after ART have attracted increasing interest and research findings are now influencing the practice of the fertility providers (Hammadieh, Olufowobi, Afnan, & Sharif, 2003; Jackson et al., 2004). Again, multiple factors influence and complicate the review of research findings, such as whether the ART pregnancies are twin or singleton; what type of ART has been used; the treatment protocol; and the underlying cause of the initial infertility.

Historically IVF has been associated with a high rate of twin pregnancies due to the practice of transferring more than one embryo. This practice has been underpinned by the belief that it will increase the possibility of at least one live birth resulting from the procedure. Over time though, studies have shown that there are fewer obstetric risks for IVF conceived singleton pregnancies (Gelbaya, 2010), hence the increasing national and international trend towards SET. This trend reflects the overall increased risk of poor perinatal and obstetric outcome with twin pregnancies, independent of whether the babies are conceived naturally or after ART (Mukhopadhaya & Arulkumaran, 2007; Sutcliffe & Ludwig, 2007).

An interesting phenomenon that is theorised to contribute to the increased incidence of perinatal adverse outcomes in neonates conceived by ARTs is that of the vanishing twin. Ten percent of ART singleton pregnancies begin as twin pregnancies and it has been shown that such pregnancies have higher risk of ending with preterm births and consequently, low birth weight babies (Wisborg, Ingerslev, & Henriksen, 2010). Sazonova et al. (2011) in their Swedish National Registry based study found that the vanishing twin phenomenon was negatively associated with very preterm birth (i.e. <32 weeks).

Women undergoing ART appear to have a significantly increased risk of gestational hypertension and pre-eclampsia, especially following an IVF conception.

Preterm birth has also been associated with ARTs. For example, Sazonova et al's (2011) study examined whether there were differences in obstetric outcomes between singleton pregnancies from double embryo transfer (DET), SET and elective SET (eSET - where one quality embryo is selected and one or more are frozen for future use). In comparing all IVF singletons (n = 11/ 347) with singletons in the general population, they found significantly higher rates for: pre-term between 28 weeks and 37 weeks; low birth weight and very low birth weight (AOR between 1.1 and 1.7) amongst the IVF singletons. It is thought that the eSET singleton pregnancies may have better obstetric outcomes as the selected embryo may be of better quality. However, irrespective of the type of embryo transfer, Sazonova et al. found that the IVF cohort had poorer obstetric outcomes than the non IVF.

Low birth weight has been identified as an adverse neonatal outcome associated with the use of ARTs. Several robust studies have highlighted this association. For example, a large US population based study (Schieve et al., 2004) reported an increased incidence of low birth weight, very low birth weight and term low birth weight in neonates conceived through ARTs. A Danish prospective follow-up study (Wisborg et al, 2010) of a cohort of primiparous women with a singleton pregnancy, found that the birth weights of term infants conceived after IVF, ICSI and non IVF ARTs were significantly lower than that of the babies of the cohort of women who had conceived spontaneously. Hayashi et al. (2012), using the Japanese perinatal database, examined for differences between ovulation stimulation and intrauterine insemination with respect to their effects on perinatal outcomes of singleton pregnancies. They found an increase in the low birth weight rate regardless of fertility treatments. They suggested the increased risk may be attributed to maternal factors, particularly maternal age and body mass index which were both higher in the ART cohort.

Until 2002 it was thought that there was no increased risk of major birth abnormalities after ART. However, a Western Australian registry-based record linkage project (Hansen, Kurinczuk, Bower & Webb, 2002) identified a twofold increase in major birth defects in those children conceived by IVF and ICSI, as compared to those naturally conceived (9% v 4.2%). A systematic review and meta-analysis of birth defects in infants conceived after IVF and ICSI, compared with infants conceived naturally, found a 30% to 40% increase in the risk of birth defects in children conceived after ART (Hansen, Bower, Milne, de Klerk & Kurinczuk, 2005).

Birth defects that have been identified with singleton ART are: septal heart defects (i.e. atrial septal defects, secundum or not otherwise specified, and ventricular septal defects plus atrial septal defects), cleft lip (with or without cleft palate), oesophageal and anal atresia (Reefhuis

et al., 2009). This was a large retrospective study that used the American National Birth Defects Prevention Study data. Although the researchers could not demonstrate this connection with multiple pregnancies, they noted that infants of multiple pregnancies were more likely to have birth defects independent of the mode of conception. It is important to note that it is difficult to get an accurate picture of the true risk of birth defects as maternal age and parity may affect the findings. In addition, it is more likely that babies conceived through ART will be examined more thoroughly by maternity practitioners, thus abnormalities are more likely to be identified (Halliday, 2007).

Rare forms of birth defects have been linked to ART. These include imprinting disorders such as Beckwith-Wiedemann syndrome, and Angelman syndrome (Metwally & Ledger, 2011). It is thought that these imprinting disorders could result from ART procedures in the early stages of cell division causing "partial or complete suppression of one of the two parental alleles of a certain gene" (Metwally & Ledger, 2011, p. 82). The IVF culture conditions, cellular manipulation, drugs used for ovarian stimulation, and the process of cryopreservation are also thought to be causative factors of the increased risk of birth defects following ART (Hansen et al., 2005; Sutcliffe & Ludwig, 2007). But it is important to note that the incidence of imprinting disorders after ART remains very rare and further studies are needed to investigate this association more carefully (Owen & Segars, 2009).

THE ROLE OF THE MIDWIFE AND ART

Infertility treatments may require significant physical, psychological and financial investment from the woman and her partner. The journey to become pregnant through ARTs can be difficult and prolonged for the couple. In addition, women who become pregnant following IVF may be more anxious because of their heightened fear of losing the pregnancy and the increased risks associated with an IVF pregnancy (Morgan, 2004). Pregnancy and birth may be seen as less of a continuum and more of a series of events, for example 'completing the first trimester' and 'going to full term', with each event having to be overcome before the parents can look forward to the birth (Toscano & Montgomery, 2009). A woman's anxiety may be exacerbated if she is in the care of a maternity carer who does not appear to fully understand the uncertainties and difficulties they have experienced having conceived through ARTs.

In New Zealand primary antenatal care is provided by a Lead Maternity Carer, this is most commonly a midwife for low risk women. Women who become pregnant after ART may also contact a midwife for primary maternity care. At this time the midwife over the course of the pregnancy, will become familiar with the family and may be able to better assist them to negotiate the pregnancy with reduced anxiety. In this situation, the midwife needs to maintain a balance between: acknowledging the emotional investment that a woman and her partner place in the pregnancy along with their anxiety and concerns, with the goal of keeping the pregnancy as normal as possible and building the woman's confidence and self-esteem. Physical pregnancy care for these women can follow the normal pattern of antenatal care and in principle could remain as for naturally conceived pregnancies (Morgan, 2004). But their emotional and psychological care needs may be different (Toscano & Montgomery, 2009).

The journey to become pregnant through ARTs can be difficult and prolonged for the couple.

Physical pregnancy care for these women can follow the normal pattern and in principle could remain as for naturally conceived pregnancies... but their emotional and psychological care needs may be different.

However, the midwife must also be aware of the increased risks associated with ART pregnancies and the role that the underlying causes of infertility may play. Midwife-only care will be appropriate for many of these women although the midwife must be vigilant and aware of the potential complications (Morgan, 2004; Frith, 2004). Therefore, as with every woman, the significance of an in-depth and complete health history as a primary and critical component of the initial contact with the midwife is reinforced. Information should be documented regarding the cause of the woman's infertility, her history of infertility treatments, any associated medical conditions, and the ART procedure itself. Consultation with, and referrals to, specialist services will need to be made as appropriate (New Zealand Ministry of Health, 2012). While the risk of birth defects is relatively small, careful assessment of the neonate should be performed. The midwife should also be aware of, and watch for, any exaggeration of the usual postnatal psychological issues, such as difficulty in adjusting to the impact of becoming parents (Fisher, Hammarberg & Baker, 2007).

A guideline produced by Mid Central Health Primary Policy Group (PMPG) (2010) addressed the issue of the appropriate and specific care these women should receive.

This guideline recommended careful history taking and for the LMC to always ask: "What underlying problem was present that necessitated the need for fertility treatment?" (p1). Also recommended is: routine screening for fetal abnormality, early screening for gestational diabetes mellitus if the woman has a history of polycystic ovary syndrome, and the provision of individual fetal growth charts as per the College of Midwives consensus statement of fetal wellbeing (NZCOM, 2012). In providing safe and effective care to such women, midwives need to have a good understanding of infertility and ARTs so that their care is "based upon the integration of knowledge that is derived from the arts and sciences" (NZCOM, 2008, p.3).

CONCLUSION

In this review we have highlighted some of the issues both for women who have conceived through the use of ARTs and for the midwives who

provide their maternity care. While ARTs have become more normalised as a means of achieving parenthood, there may be associated risks. There is debate as to the causes of these risks, whether they are attributable to the underlying infertility issues and associated medical disorders, or to the ART procedures themselves. Midwives, as the main care givers for pregnant women in New Zealand, need to be well informed, mindful of the potential risks to the mother and her baby whilst providing care that is the most appropriate and supportive, to enable these women to achieve a safe and satisfying childbirth experience.

REFERENCES

Chen, X.K., Wen, S.W., Bottomley, J., Smith, G., Leader, A., & Walker, M.C. (2009). In Vitro Fertilisation is Associated with an Increased Risk for Pre-eclampsia. Hypertension in Pregnancy, 28, 1–12. Doi: 10.1080/10641950802001859

Evers, J. (2002). Female subfertility. *Lancet*, 360, 151-159.

Fisher, J., Hammarberg, K., & Baker, G. (2007). Antenatal mood and fetal attachment after assisted conception. *Fertility & Sterility*, *89*(5) 1103–1112. Doi:10.1016/j.fertnstert.2005.02.016

Frith, L. (2004). Reproductive technologies and midwifery. In L. Frith & H. Draper (Eds.), *Ethics and Midwifery*. 2nd Edition. (pp.185-203). London: Elsevier Science.

Gambone, J. (2006). Are adverse pregnancy and fetal outcomes more common with assisted reproductive technologies? What should patients be told? *Clinical Obstetrics and Gynecology, 49*(1), 123-133.

Gelbaya, T.A. (2010). Risks to women of IVF. Short and long-term risks to women who conceive through in vitro fertilisation. *Human Fertility, 13*(1): 19–27. Doi:10.3109/14647270903437923

Halliday, J. (2007). Outcomes of IVF conceptions: Are they different? *Best Practice and Research Clinical Obstetrics and Gynaecology, 21*(1), 67-81. Doi:10.1016/j.bpobgyn.2006.08.004

Hammadieh, N., Olufowobi, O., Afnan, M., & Sharif, K. (2003).Factors affecting the outcome of in vitro fertilisation treatment. In J. Studd (Ed.), *Progress in Obstetrics & Gynaecology* (pp. 259-276). London: Churchill Livingstone Elsevier.

Hansen, M., Kurinczuk, J., Bower, C., & Webb, S. (2002). The risk of major birth defects after intracytoplasmic sperm injection and in vitro fertilisation. *New England Journal of Medicine, 346*, 725-730. Doi:10.1056/NEJMoa010035

Hansen, M., Bower, C., Milne, E., de Klerk, N., & Kurinczuk, J. (2005). Assisted reproductive technologies and the risk of birth defects – a systematic review. *Human Reproduction, 20*(2), 328-338. Doi:10.1093/humrep/deh593

Hayashi, M., Nakai, A., Satoh, S., & Matsuda, Y. (2012). Adverse obstetric and perinatal outcomes of singleton pregnancies may be related to maternal factors associated with infertility rather than the type of assisted reproductive technology used. *Fertility & Sterility, 98*(4), 922 – 928. Doi:10.1016/j.fertnstert.2012.05.049

Jackson, R., Gibson, K., & Wu, Y. (2004). Perinatal outcomes in singletons following in vitro fertilisation: A meta-analysis. *Obstetrics and Gynecology, 103*(3), 551-563. Doi:10.1097/01.AOG.0000114989.84822.51

Kallen, B., Finnstrom, O., Nygren, K., Olausson, P., &Wennerholm, U. (2005). *In vitro* fertilisation in Sweden: Obstetric characteristics, maternal morbidity and mortality. *British Journal of Obstetriocs & Gynaecology*, 112, 1529 – 1535. Doi:10.1111/j.1471-0528.2005.00745.x

McDonald, S., Murphy, K., Byene, J., & Ohlsson, A. (2005). Perinatal outcomes of in vitro fertilisation twins: A systematic review and meta-analyses. *American Journal of Obstetrics and Gynecology*, 193, 141-152. Doi:10.1016/j.ajog.2004.11.064

Metwally, M., & Ledger, W. (2011). Long-term complications of assisted reproductive technologies. *Human Fertility, 14*(2), 77–87. Doi:10.3109/14647273.2011.580550

MidCentral Health Primary Policy Group (2010). *Primary care for women who have required fertility treatment to conceive*. Palmerston North, New Zealand: MidCentral Health.

Morgan, J. (2004). The assisted conception pregnancy. *The Practising Midwife, 7*(8), 18-21.

Mukhopadhaya , N., & Arulkumaran, S. (2007). Reproductive outcomes after in-vitro fertilisation. *Current Opinion in Obstetrics and Gynecology, 19*, 113-119.

Murray, A., Hutton, J., & Peek, J. (2005). Responsible IVF treatment in New Zealand is the preferential transfer of a single embryo. *New Zealand Medical Journal, 118* (1212),

New Zealand College of Midwives. (2008). *Midwives handbook for practice*. Christchurch, New Zealand: New Zealand College of Midwives.

New Zealand College of Midwives. (2012). *Assessment of fetal well being during pregnancy*. Christchurch, New Zealand: New Zealand College of Midwives. Retrieved from http://www.midwife.org.nz/index.cfm/3,108,559/antenatal-fetal-wellbeing-2012.pdf

New Zealand Ministry of Health (2012). *Guidelines for consultation with obstetric and related medical services (Referral guidelines)*. Wellington, New Zealand: Ministry of Health.

NICE. (2013). *Fertility: Assessment and treatment for people with fertility problems. A clinical guidelin*e. Retrieved March 1, 2013 from http://guidance.nice.org.uk/CG156

Nygren, K., Finnstrom, O., Kallen, B., & Olausson, P. (2007). Population-based Swedish studies of outcomes after in vitro fertilisation. *Acta Obstetricia et Gynecologica, 86*, 774-782. Doi:10.1080/00016340701446231

Owen, C., & Segars, J. (2009). Imprinting disorders and assisted reproductive technology. *Seminars in Reproductive Medicine, 27*(5), 417-428.

Paterno, M. (2008). Families of two: Meeting the needs of couples experiencing male infertility. *Nursing for Women's Health, 12*(4), 300-306.Doi:10.1111/j.1751-486X.2008.00344.

Poikkeus, P., Gissler, M., Unkila-Kallio, L., Hyden-Granskog, C., & Tiitinen, A. (2007). Obstetric and neonatal outcome after single embryo transfer. *Human Reproduction, 22*(4), 1073-1079. Doi:10.1093/humrep/del492

Reefhuis, J., Honein, M., Schieve, L., Correa, A., Hobbs, C., & Rasmussen, S. (2009). Assisted reproductive technology and major structural birth defects in the United States. *Human Reproduction, 24*(2), 360-366. Doi:10.1093/humrep/den387

Sazonova, A., Ka¨llen, K., Thurin-Kjellberg, A., BrittWennerholm, U., & Bergh, C. (2011). Obstetric outcome after in vitro fertilisation with single or double embryo transfer. Human Reproduction, 26(2), 442–450. Doi:10.1093/humrep/deq32

Schieve, L., Ferre, C., Peterson, H., Macaluso, M., Reynolds, M., & Wright, V. (2004). Perinatal outcome among singleton infants conceived through assisted reproductive technology in the United States. *Obstetrics & Gynecology, 103*(6), 144-1153. Doi:10.1007/s10995-007-0202-7.0202-7

Sutcliffe, A., & Ludwig, M. (2007). Outcome of assisted reproduction. *Lancet*, 370, 351-359. Doi:10.1016/S0140-6736(07)60456-5

Toscano, S., & Montgomery, R. (2009). The Lived Experience of Women Pregnant (Including Preconception) Post In Vitro Fertilisation through the lens of virtual communities. *Health Care for Women International, 30*(11), 1014-1036. Doi:10.1080/07399330903159700

Wang, Y.A., Chambers, G.M., & Sullivan, E.A. (2010). *Assisted reproductive technology in Australia and New Zealand 2008. Assisted Reproductive Technology Series, 14*. Canberra: Australian Institute of Health and Welfare.

Wisborg, K., Ingerslev, H., & Henriksen, T. (2010). In vitro fertilisation and preterm delivery, low birth weight, and admission to the neonatal intensive care unit: a prospective follow-up study. *Fertility & Sterility, 94*(6), 2102 – 2106. Doi:10.1016/j.fertnstert.2010.01.014

World Health Organisation. (2013). Health Topics: Infertility. Retrieved March 1, 2013 from http://www.who.int/topics/infertility/en/

Accepted for publication March 2013

Allot, L., Payne, D., Dann, L. (2013) Midwifery and Assisted Reproductive Technologies. *New Zealand College of Midwives Journal*, 47, 10-13.

DOI: http://dx.doi.org/10.12784/nzcomjnl47.2013.2.10-13

NEW ZEALAND RESEARCH

Nurturing the next generation: Midwives' experiences when working with third year midwifery students in New Zealand

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ABSTRACT

Midwifery students require appropriate and timely access to clinical learning opportunities while completing a Bachelor of Midwifery and to achieve this they must be supported by practising midwives. This research sought to understand what supports midwives to work effectively with third year midwifery students.

Midwives on the school's database who regularly worked with midwifery students were invited to participate in the research. Data were gathered using midwife focus groups.

The results reveal i) most placements were a positive experience, ii) issues were described that related to the students' professional behaviour, iii) tensions were experienced by the midwife between the needs of the woman and the needs of the student and iv) tensions were experienced by the midwife as they moved between the roles of teacher, supporter and assessor of the student. Potential for further research is suggested.

KEY WORDS

Midwifery student, midwife, clinical placements, preceptor, New Zealand.

INTRODUCTION

Midwifery education in New Zealand is delivered in tertiary institutions with the clinical component undertaken in partnership with practising midwives in both hospital and community settings. Students commence clinical placement within their first year of the New Zealand Bachelor of Midwifery programme and this increases over the programme to 80% (1280 hours) in their final year (Midwifery Council of New Zealand, 2007). When working with students, midwives are encouraged to reflect on their practice and find ways to articulate their practice knowledge to students. By discussing their practice midwives become aware of the "knowledge, feelings, expectations, assumptions, attitudes, beliefs and values" that contribute to their decision making and this helps them to gain a "deeper understanding of their own practice" (Best & Edwards, 2001, p.70). This paper examines the student – midwife partnership in the context of New Zealand undergraduate midwifery education, focusing on the views of the midwives who worked with third year midwifery students.

CONTEXT

To meet the projected shortage of midwives within New Zealand (due to an aging midwifery workforce) (Midwifery Council New Zealand, 2010), the Midwifery Council of New Zealand (MCNZ) has encouraged midwifery schools to increase their graduate numbers (MCNZ, 2010; Pairman, 2009). This was supported by the introduction of a new curriculum in 2009 (Otago Polytechnic and Christchurch Polytechnic Institute of Technology) and 2010 (Auckland University of Technology and Waikato Institute of Technology) which uses flexible delivery and seeks to "increase access to more midwifery students" (Pairman, 2009), particularly in rural areas. The new curriculum has increased both theory and practice hours and takes the total learning to 4800 hours (from 3600 hours), requiring students to work an average of 35.5 hours per week during a 45-week teaching year and is delivered over three years (MCNZ, 2007).

To meet the curriculum requirements students complete half of their programme in clinical placement. During this time students are immersed in the social, practical and ethical context of practice and this influences their understanding of the culture of midwifery and their place in it. Students undertake placements within both hospital and community settings throughout the three years of the programme. Community placements are usually with one midwife for up to four months. Within the hospital setting students work with a variety of midwives depending who is rostered for the shift. Anecdotally students often report a closer and stronger working relationship between themselves and the midwife in the community than with midwives in hospital placements.

Midwives are supported during the student's placement through the provision of a preceptor workshop facilitated by the midwifery school. This is a one day workshop which discusses the Bachelor of Midwifery curriculum, adult learning principles and student assessment. Support is also provided by face-to-face meetings and phone calls with the student and midwife and documentation of the student's learning goals. Assessment of the student's progress is undertaken by the midwifery school and by using feedback from the midwife within the clinical placement.

LITERATURE REVIEW

Little is written in the literature about midwives' motivation for working with midwifery students. However, literature on medical students suggests passing on knowledge and student's enthusiasm are important motivators; with remuneration amongst the least important of motivators (Scott & Sazegar, 2006). The literature also suggests that students who have positive clinical placements learn to be confident, assertive and autonomous practitioners (Miles, 2008).

While there is little describing the midwife's experience in New Zealand, research undertaken in Britain describes the experience of midwife mentors who work with midwifery students. This discusses the importance of the

midwife mentor working regularly alongside the student (Fisher & Webb, 2009; Jones, Walters & Akehurst, 2001) and of the mentor being an effective role model (Fowler, 2008). The literature also discusses the need for midwife mentors to feel valued and supported in their role (Bray & Nettleton, 2007; Fisher & Webb, 2009), and the complexity of being an assessor and supporter of the student (Bray & Nettleton, 2007). In the New Zealand context the concept of mentoring is usually applied to new graduate midwives and involves a negotiated relationship between two people (Kensington, 2006).

RESEARCH OBJECTIVE

The research objective was to explore the experiences of midwives when working alongside third year midwifery students in a New Zealand setting and, in particular, what contributed to a positive placement experience for the midwife.

METHOD

To explore midwives' experiences, a design that allowed midwives to share their experiences was necessary. For this purpose focus groups provided the forum to gather the information required since it was felt these would elicit a wider range of experiences than individual interviews and these would be mediated by the group dynamics (Cluett & Bluff, 2006; Kamberelis & Dimitriadis, 2005). An invitation to participate in the research was sent to midwives within a specific geographical area of New Zealand, who regularly worked with midwifery students. Midwives were allocated to two focus groups, in order of when they first contacted the researcher, with six midwives in each group. Ethical approval was gained from the ethics committees of the University Of Waikato Faculty Of Education and the midwifery school.

A community venue was used for each of the focus group sessions, with each session lasting for two hours. Trigger questions were used to initiate the discussion. For example, the participants were asked to describe a positive experience they had when working with third year midwifery students. They were also asked how they perceived the role of the student, the role of the school and the role of the midwife within this relationship. The session was audio and video recorded. The interviews were transcribed by the researcher and sent to the participants for review. The transcripts were read to identify common characteristics and these were then grouped into two key themes, with a further three themes identified in each area.

PARTICIPANTS

Ten of the twelve midwives worked as Lead Maternity Carer (LMC) midwives, and two within a hospital setting. This is representative of the student's placement in their third year which is predominantly in the community working alongside LMC midwives, but also includes a hospital placement. Eight participants had been working with student midwives for seven or more years. Eight participants had been practising for over nine years.

FINDINGS

Two main themes were identified. These were: midwives' work with students and implications for midwives practice.

MIDWIVES WORK WITH STUDENTS

The first key theme described the midwives' work with students and included three sub-themes:

That confidence thing

The midwives described their pleasure in watching students gain confidence and competence during their clinical placements. A sense of pride and ownership of the student's achievement was evident amongst the group as they discussed times when their student had taken a "real" part and the "buzz" this gave them.

> *I really like it when they... it's that confidence thing... when they do a palpation and realise this baby is breech and they recognise it.*

The balance between personal and professional when relating to women was an area that students sometimes struggle with.

The midwives discussed the need for students to step up when required and the strategies they used to create opportunities for the student to increase their learning and confidence. For example, during an antenatal visit the student used the seat usually occupied by the midwife to demonstrate that the student was leading the antenatal visit.

The midwives discussed working with students who had experienced *"put-downs"* (from other midwives) in the past and how they worked to build the students' confidence.

> *I have had a third year student where the first month was spent undoing the put-downs she had from previous placements and rebuilding her confidence - it wasn't her midwifery skills that were a problem – it was her confidence in her abilities.*

The group identified that they enjoyed the *"enthusiasm"* and *"fresh knowledge"* the students brought to clinical.

It's not just about clinical skills

The participants discussed how they expected students to demonstrate the ability to plan care which was appropriate to each woman by anticipating what might be required.

> *It helped her to see it's not just all about clinical skills. It's about thinking and putting the whole picture together.*

The participants described the year three placement as exciting as they saw students *"bringing it all together"* with the integration of theory and practice. Third year students were expected to demonstrate understanding of complex situations and to think like a midwife.

The unpredictability of clinical placement created some problems when students did not appear to participate in the learning opportunity that was available. One participant stated:

> *students need to be encouraged to understand that every experience offers learning opportunities and is positive in that sense.... she might have a crap day but (there are) still skills that the midwife has (to teach the student).*

Learning to be professional

Breaches of professionalism by students frustrated the participants since it was expected students would understand these clearly within the first year of their education. Examples of unprofessional behaviour included being late to placement, poor communication skills, lack of confidentiality and the inability of the student to reflect on their own professional behaviour. Participants described when students would share their own birth experiences with women in ways the midwife did not feel was appropriate. The balance between personal and professional when relating to women was an area that students sometimes struggled with.

> *trying to get the balance between personal and professional life with the woman – little bits of yourself are okay but its knowing what is that barrier – that grey area you shouldn't step in there.*

The midwives acknowledged this was challenging and fluid at times, and that it required acute awareness of what was appropriate in each situation.

The participants described times when they were required to support students as they learnt to balance the multiple demands of study and family.

Yeah, we're the ones that take the meltdowns.

Sometimes you feel like you're their mother and say, well I know, but this has to be done today.

IMPLICATIONS FOR THE MIDWIVES PRACTICE

The second key theme described the implications for the midwives' in their day to day practice and included three sub-themes:

We are responsible

The midwives were aware of their professional responsibility to supervise the student appropriately and to provide timely and appropriate feedback to support the student's development and progression. The fear of the student failing concerned the midwives as they felt this could be a reflection of the quality of the placement and the learning the student had experienced with them.

I had a student who failed.... you know it's nothing that you did but you feel absolutely gutted, you think, could you have done more?

Participants were aware their practice was critiqued when working with a student and welcomed this as providing transparency around their practice. A participant stated that those midwives who did not want to be responsible for the student would not agree to work with students, although it was acknowledged that hospital midwives did not have the same choice.

Most participants had used the leaflet provided by the midwifery school to explain the role of the student to the woman. The midwives described the tensions between the needs of the woman and of the student, including when women declined to have a student involved with their care. For one participant this meant the student had to absent herself from the clinic room during the woman's visit.

Even if you are not doing anything, (the woman) wants you to look like you are. You can't step so far back that the woman feels she's not supported by her midwife.

The participants discussed how they encouraged women to work with students and one stated she saw this as a way for women to help safeguard the midwifery service for the area by ensuring sufficient numbers of midwives.

What is expected of me

The midwives discussed the difficulties they had when assessing students. They stated they were anxious to get it right particularly when they felt a student did not meet the standard that was expected. Many of the participants stated the written information provided by the midwifery school was not always read fully, as they found it text heavy, but the preceptor workshop was found to be useful. The midwives felt they had often underestimated the time commitment required to debrief and feedback to the student.

I think I underrated when I first took a student how much input I was going to – how organised I was going to have to be and quite what their needs were and now I'm much more aware of the fact that I do need to devote some specific time each week looking at what we've achieved, what skills they've managed to practise, what experience they need to debrief about 'cause I tend to finish the day with the student and go, 'see you, bye I'm off home' and I needed to recognise that it's not appropriate.

For LMC midwives, providing feedback was easier if there was travelling involved in the day, as they used the time in the car together to debrief. For hospital midwives this was a part that they felt was absent in their relationship with the student.

The midwives described how they did not always enjoy providing written feedback on the students' performance particularly when students were not achieving at the expected level.

The paperwork has to be done but sometimes you can say things more nicely in words than if you have to write it down. It looks a bit harsh… 'lacks knowledge' … when written down.

> The relationship between the midwife and the student is central to the learning process.

Wanting a break

Most of the midwives had established a relationship with the student by meeting first to identify the student's goals and aspirations. They acknowledged that not all relationships between midwife and student worked. While the midwives agreed that students helped with the workload, this was offset by the extra time required for the midwife to explain what she was doing and to debrief. At times the midwives missed the spontaneity of working alone and getting their own hands on. For some, the peace in between visits was cherished rather than the constant talk of someone else present.

Sometimes I get tired of all the talking and all the energy that's required to go into (students).

However the midwives saw themselves as role models for the students and felt it was important to share their knowledge to grow the profession.

I do it for the future (of midwifery) and not for the money.

DISCUSSION

The findings from this study suggest that the relationship between the midwife and the student is central to the learning process, and this can lead to a positive or negative experience for both. A trusting relationship is required for the student to share their thoughts and feelings and feel supported by the midwife (Best & Edwards, 2001). When a mismatch of expectations or miscommunication occurs, the placement may break down. This may be due to the midwife having unrealistic expectations or to the student being perceived as lacking knowledge. These tensions may impact on the student's confidence and this can influence the midwife's desire to work with students in the immediate future. A Canadian study found conflict between the practitioner and student was more widespread than the researchers expected and they recommended it needed to be managed well to prevent negative outcomes (Mamchur & Myrick, 2003).

While the relationship between the student and the midwife is a professional one, to support the student in their learning, the midwife should not be expected to provide support and emotional care for the student. Instead the focus should be on the woman who is receiving care. A British study identified a lack of social skills amongst students as a challenge for midwifery mentors (Fisher, 2009). Her study also identified that "the student's inability to cope with the stresses and social complexities of midwifery practice and the time needed to support these students also caused anxiety" amongst midwives working with them (p.32).

An important issue arising from this research is midwives' concern about student's professionalism. The preparation of students for clinical placement is essential as students need to have the expected skills and an understanding and sensitivity of the culture they are entering. Learning professional behaviours requires clear standards and expectations that are modelled by midwives in the midwifery school and in practice. The boundary regarding what and when it is appropriate for practitioners to share personal information in a professional relationship is currently poorly defined. Students need midwives to role model, expected behaviours about what is appropriate in creating an atmosphere of trust within a professional relationship.

Students need midwives to role model expected behaviours about what is appropriate in creating an atmosphere of trust within a professional relationship.

Learning to work as a midwife requires the student to manage multiple demands from study, clinical placement and family. It is not unexpected then that anecdotally students report feeling tired and overloaded and this may affect their work. However in the New Zealand maternity system, an LMC midwife is a self-employed practitioner. Her reputation and standing in the community can influence her ability to build and maintain a caseload and therefore an income. Thus there can be a profound double impact when a student is inappropriate within placement. Firstly there is offence to the woman and her family, and secondly a risk to the midwife's reputation and income (should the offended woman seek care from another LMC).

The results from this study reveal that midwives expected more support over and above the preceptor workshops, particularly when working with a failing student. The nature of this support should include a close relationship with the midwifery school during the placement, including regular contact and succinct information about expectations. By having regular discussion with midwives, the midwifery school can gain ongoing feedback about the facilitating structures that are most appropriate to support students in their development toward becoming a professional midwife. Feedback is described as the "breakfast of champions" (Knowles, 1984, p.75) and this is necessary for students to develop their practice from learner to competent, and progress as a midwife to expert status.

LIMITATIONS

While focus groups can elicit a wider range of experiences than individual interviews, these can be mediated by the group dynamics. This can limit data capture and introduce bias.

A further limitation was the researcher also acted as the group facilitator. However to maintain facilitator independence, the facilitator did not participate in any of the discussions and strictly confined herself to trigger questions.

This was a small group of twelve midwives from community and hospital workplaces who shared their experiences of working with students. While some of these findings may be transferable to other groups of midwives, they are not generalisable.

FUTURE RESEARCH

Research from Britain uncovered similar experiences to those described anecdotally by New Zealand midwifery students; however, no formal research of midwifery students' experiences of clinical placement has been undertaken in New Zealand. The voice of midwives who choose not to work with midwifery students would be a valuable contribution. While there is a professional expectation that all midwives will work with students, a small group do not do so.

CONCLUSION

The midwives acknowledged their professional responsibility to work with midwifery students. However they also expected a break as they enjoyed the opportunity to practise separately of students. By third year the midwives expected the students to have mastered the required basic midwifery skills and to have a strong knowledge base to build from. Midwives were frustrated if students could not manage this, and if they did not appear to understand appropriate professional behaviours and boundaries. While tensions arose at times as midwives found themselves in the roles of teacher, support and assessor for the student, most placements were described as a positive experience and the midwives took pleasure in the student's progression through the programme. However, the tensions midwives face must be acknowledged and mitigated by both the school and the profession. By nurturing our emerging midwives through a trusting relationship where the experienced midwife feels well supported, we strengthen the midwifery profession for tomorrow.

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REFERENCES

Best, D. & Edwards, H. (2001). Learning together: fostering professional craft knowledge development in clinical placements. In Higgs, J. & Titchen, A. (Eds). *Practice knowledge and expertise in the health professions.* (pp. 165 -177). Oxford, UK: Butterworth-Heinemann.

Bray, L. & Nettleton, P. (2007). Assessor or mentor? Role confusion in professional education. *Nurse Education Today, 27*, 848-855.

Cluett, E. & Bluff, R. (2006). *Principles and practice of research in Midwifery.* Philadelphia, PA: Elsevier.

Fisher, M. (2009). How can midwifery sign-off mentors be supported in their role? An evidence-based discussion of the challenges facing clinicians, managers and academics. *MIDIRS Midwifery Digest, 19:3,* 319-324.

Fisher, M. & Webb, C. (2009). What do midwifery mentors need? Priorities and impact of experience and qualification. *Learning in Health and Social Care, 8*(1), 33-46.

Fowler, D. (2008). Student midwives and accountability: are mentors good role models? *British Journal of Midwifery, 16*(2). 100-104.

Jones, M., Walters, S. & Akehurst, R. (2001). The implications of contact with the mentor for preregistration nursing and midwifery students. *Journal of Advanced Nursing, 35*(2), 151-160.

Kamberelis, G. & Dimitriadis, G. (2005). Focus Groups: Strategic articulations of pedagogy, politics, and inquiry. In Denzin, N. & Lincoln, Y. (Eds). *Handbook of Qualitative research* (pp. 887-908). California: Sage.

Kensington, M. (2006). The faces of mentoring in New Zealand: Realities for the new graduate midwife. *New Zealand College of Midwives Journal, 35*, 22-27.

Knowles, M. (1984). *The adult learner: a neglected species.* Texas: Gulf Publishing Company.

Mamchur, C. & Myrick, F. (2003). Preceptorship and interpersonal conflict: a multidisciplinary study. *Journal of Advanced Nursing, 43*(2),188-196.

Midwifery Council of New Zealand. (2007). *Standards for approval of pre-registration midwifery education programme and accreditation of tertiary education organisations.* Wellington, New Zealand.

Midwifery Council of New Zealand. (2010). *Midwifery workforce report.* Wellington, New Zealand.

Miles, S. (2008). Make or break: the importance of good mentorship. *British Journal of Midwifery, 16*(11), 704-711.

Pairman, S. (2009, November). Chairperson's column. In Midwifery Council of New Zealand. *Midpoint.* Wellington, New Zealand: Midwifery Council of New Zealand.

Scott, I. & Sazegar, P. (2006). Why community physicians teach students (or not): barriers and opportunities for preceptor recruitment. *Medical Teacher 28*(6), 563-565.

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The shaping of midwifery education in Aotearoa, New Zealand

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ABSTRACT

This paper reviews approaches to midwifery education from the 1900s to 2013. During this time, education has been influenced by various factors such as: midwifery registration, perinatal mortality rates, pain relief and technology for childbirth, educational theory, the consumer movement, midwifery autonomy and economic imperatives. The various factors have not only influenced what has been taught in midwifery education but how it has been taught (the pedagogical approach). Uncovering what has shaped the pedagogy assists in understanding assumptions about the way midwives are educated and opens the potential to consider new pedagogical approaches, such as narrative pedagogy.

KEY WORDS

Pedagogy, midwifery education, narrative pedagogy.

INTRODUCTION

Over the course of the last century, midwifery education in Aotearoa, New Zealand, has undergone many transformations. Learning to be a midwife has been transformed from solely learning through experience (apprentice model) to the current three year Bachelor's degree (now encompassing the equivalent of 4 years' learning). Midwifery education has been shaped by social, medical and economic influences as well as learning theories. These various drivers have not only influenced what has been taught in midwifery education (curricula content), but also how teaching and learning happened. The how of teaching and learning is termed 'pedagogy' which, in this paper, is further defined as: the philosophical underpinning of educational research and practice (Diekelmann & Diekelmann, 2009). Uncovering what has shaped the pedagogical approach assists in the understanding of taken-for-granted assumptions about the way midwives are educated and opens the potential to consider trying new pedagogical approaches, such as narrative pedagogy. This paper reviews the pedagogical approaches to midwifery education from the pre-1900s to 2013.

LEARNING MIDWIFERY THROUGH AN APPRENTICESHIP MODEL

Up until the end of 19th century in Aotearoa, New Zealand, the pedagogy which underpinned midwifery education was based on learning through observation and experience. Women would typically learn about helping during childbirth in what has since been described as an apprenticeship model; through helping friends and family during childbirth, or observing and assisting an experienced midwife (Kalisch, Scobey, & Kalisch, 1981). It is acknowledged that, prior to colonisation by European settlers; Māori in Aotearoa, New Zealand had well established birthing practices. These included the passing on of knowledge and skills from men and women in one generation to the next, so Māori had specialist knowledge to help in childbirth (Clarke, 2012; Makereti, 1986; Rimene, Hassan, & Broughton, 1998). It is not within the scope of this article to examine childbirth practices in general, or the way that midwifery was learned by Māori. Our focus is on midwifery education post-colonisation.

In the early 1800s, the majority of women who settled in Aotearoa/New Zealand, emigrated from Great Britain and followed the practice of giving birth in their own homes as they had done in Europe. Women called upon an experienced friend, relative ,'handywoman' or midwife (who was sometimes a missionary) to assist them, during and after the birth (Clarke, 2012). Various stories from that time, told in women's diaries and letters sent 'back home', captured the way that midwifery skills were learned. One story refers to Sarah Herbert (1814-76), of Wainui, who "became an experienced midwife, and with so many children of her own, knew what to do in times of sickness" (Macgregor, 1973, p. 90) Herbert was famous for having walked 15 miles through the bush when Mrs. White, the wife of the head shepherd at Oakbourne station, was confined (Macgregor, 1973).

Stories show that with no formal midwifery education or registration available, a handywoman was often a relative or a neighbour who had learned her skills of midwifery in several ways. Through her own experience of childbirth, through the experience of attending other women alongside another experienced handywoman, trained nurse or doctor, and though sharing of practice stories (Donley, 1986). As she had no formal midwifery education or registration, it was the practice and skills of a handywoman which established her reputation, and the fee which she could expect for her services. At the time handy women could determine whether or not they referred to themselves as midwives because there was no requirement for education or registration.

POLITICAL PRESSURE TO REGULATE MIDWIFERY PRACTICE

By the late 1800s, in the United Kingdom (UK), formal training for nurses and midwives was being introduced, and some emigrated to Aotearoa, New Zealand (Clarke, 2012). A midwife who had received formal training was seen by some families as more desirable and she could command a higher fee for her services than those who were not formally trained. Grace Neill was a Scot who had trained as a nurse and midwife in Edinburgh and who immigrated to Aotearoa, New Zealand in 1893. Neill became the assistant Inspector of Hospitals and Asylums and was influential in establishing midwifery registration and education. With her experience as a trained midwife, and in her role as Inspector, Neill felt sympathetic towards women who could "only afford the help of unskilled neighbours or, worse, of ignorant and often unscrupulous women practising as

professional midwives" (Neill, 1961, pp. 49-50). Neill wanted to establish 'proper' training and registration for nurses and midwives. She promoted the idea that a midwife who had no formal training was ignorant and superstitious compared with a more knowledgeable and skilled midwife who had attended a formal training programme.

It was a political motivation that was to drive the call for midwifery registration and training. New Zealand's Liberal government was embarking on a programme of social legislation (Hill, 1982). The perinatal mortality rate was high at the time and the Prime Minister, Richard Seddon, stated in his 1904 manifesto that, "humanity for the mother and infant" was a priority for his government. Neill lobbied Seddon and others, expressing that she was appalled that the only way of becoming a handywoman was through a woman's own experience (Neill, 1961). Neill's mission was accomplished when Seddon introduced the Midwives Act (1904), which established the legal requirement for registration and training of midwives. As well as the first Register of Midwives, the Midwives Act (1904) provided for the establishment of state-funded maternity hospitals, named St. Helens hospitals after Seddon's home town back in England.

When Seddon gave his speech introducing the 1904 Midwives Act, he made a point of discrediting untrained midwives' sources of knowledge. He stated that "midwives are usually of advanced years and when asked how they obtained their knowledge would say 'Oh, I just picked it up!' (cited in Neill, 1961, p. 54). The knowledge that was 'just picked up' through experience was now judged as inferior to the kind of knowledge a student midwife would gain from a formal lecture or textbook. Midwifery registration, legally required under the Midwives Act, marked the end of the apprenticeship-style of learning through experience as the only form of learning. A pedagogical approach founded on learning midwifery through a combination of lectures, practical work and examinations over a defined period of time emerged.

Formal midwifery education commenced with the opening of the first St. Helens hospital in Wellington in 1905, followed soon after by hospitals in three other cities. St. Helens hospitals continued as the principal location for midwifery teaching from 1905 through to 1980. This early education model provided a maternity workforce, with student midwives working shifts on the wards and then attending lectures given by medical doctors and senior nurses or midwives (Neill, 1961). The Midwives Act (1904) specified the practical and theoretical requirements for student midwives, and also set the midwifery examination, the passing of which was established as a legal requirement if wanting to practise as a midwife. A woman who had been practising as a handywoman or unregistered midwife could also apply for registration as a Class B midwife, providing she had been in practice for three years and could show evidence of being of good character (Hill, 1982).

THE NEED FOR MORE TECHNICAL KNOWLEDGE: TO PROVIDE PAIN FREE BIRTH

After the First World War (1914-18), the maternal mortality rate in Aotearoa, New Zealand was one of the highest in the developed world and was mostly attributed to puerperal sepsis (Mein Smith, 1986). This was an international embarrassment for the New Zealand Government, and led to an enquiry into puerperal sepsis and the maternal mortality rate. The enquiry resulted in recommendations for procedures for asepsis and sterilisation in maternity care. These procedures were published in two pamphlets, 'The general principles of maternity nursing' and 'The management and aseptic technique of labour and the puerperium', together known as H.- Mt.20 regulations (Mein Smith, 1986). The H.-Mt. 20 regulations were first issued in 1926 and resulted in the adoption of strict routines and teaching asepsis and sterilisation techniques for all births. These regulations, with their emphasis on learning aseptic procedures and routines, were to dominate midwifery practice and education from the 1920s to the 1960s. Midwifery teachers were charged with training students to the standards laid down in the H.-Mt.20 regulations. Integrated within the teaching of these standards was the assumption that practical experience was all that was needed to become a midwife and that if students had plenty of practical experience and followed the rules then they would learn to be 'good' midwives. Formal teaching at this time was didactic with tutors 'instilling' knowledge. Mary

If students had plenty of practical experience and followed the rules then they would learn to be 'good' midwives.

Lambie (1956) writes of her experience as a student midwife in the 1920s. Whilst Lambie recalled formal lectures, she particularly noted the excellent learning she had gained informally when attending home births with a midwifery sister.

In the 1930s, although asepsis was still very much emphasised in midwifery curricula, relieving pain became a new responsibility for those attending women in labour. Relief from the pain of labour came to be seen by middle-class women as a modern and superior approach to the childbirth experience. Dr Doris Gordon and women's organisations of the time, became active in lobbying for the right of women to have painless childbirth (Mein Smith, 1986). Up until the late 1930s, St. Helens hospitals had remained the preserve of midwives. As women's demands for pain relief increased, they were choosing to have their babies in hospitals supervised by a doctor and under the care of nurses - not necessarily midwives. The provision of pain relief for labouring women became significant for midwifery education and practice because it established in the lay public's mind, the link between childbirth and medical and nursing care. Midwives were not initially authorised to administer pain relieving drugs, so the provision of pain relief gave doctors an area of specialist expertise in maternity care, and reinforced medicine's growing influence on childbirth practices, midwifery practice and education. Thus institutional birth gained ground and medicine gained dominance over midwifery practice.

By 1945 it was deemed that special training was required for midwives so that they could learn about safe administration of pain relief. This was one of the first delegated medical tasks which came to influence the content of midwifery curricula. It was incorporated into midwifery training as is reflected by the syllabus from 1945 which consisted of a list of practical work to be completed and a section on how to administer obstetric anaesthesia (Health Department of New Zealand, 1945).

Throughout the 1930s and into the 1940s, the student midwife was someone to be trained; it was assumed that midwifery could be learned if a set number of lectures and practical tasks were completed.

SOCIAL CHANGE AND EDUCATION THEORY: PROMOTING SENSITIVE MIDWIFERY

In the post-war environment of the 1950s, social circumstances were again changing. Parents were demanding more say in their care, a more satisfying birth experience, more cognisance of the mother and child relationship, and a more family-centred approach (Parents Centre New Zealand, 2009). In 1963, the Maternity Services of the Board of Health recommended that student midwives' learning be augmented so that they could attend to the social, emotional and cultural needs of families (Hill, 1982). By this time, the midwifery curriculum looked quite different from the syllabus of the previous 60 years. Rather than a list of practical and theoretical requirements to be checked off, the 1962 midwifery curriculum included topics such as psychology, social conditions and cultural differences (Nurses and Midwives Board, 1962). The social circumstances of the time again influenced pedagogical practices.

Not only did midwives need knowledge about the technology used in obstetrics; they also needed the knowledge to attend to the woman's emotional experience.

Along with the societal expectations of the 1950s and 1960s, behavioural psychology and educational theories influenced and re-oriented the pedagogical approach to midwifery education. Psychological research of that period was founded on the idea that mental processes could be understood and human responses explained, because human beings were information processing systems and human behaviour was the result of mental processes (Earl, 1961). Psychological research influenced educational theorists to suppose that human beings processed new knowledge cognitively in a predictable way, and that learning could, therefore, be measured and evaluated in an objective manner.

In 1949, Ralph Tyler published his influential book 'Basic principles of curriculum and instruction.' Tyler held that it was the role of the curriculum to define educational objectives which should be stated in terms of measurable outcomes. Tyler's (1942, 1949) ideas were based on theory which came from behavioural psychology; that if the curriculum is stated in terms of predetermined measurable objectives, then the outcomes of learning can be controlled by the educational experiences in which the learner is required to participate. The assumption that learning is a rational, linear, orderly and sequential process, underpins the thinking around curricula based on pre-determined measurable learning outcomes. A pedagogical approach based on assessing students' achievement of learning outcomes has been referred to as behavioural pedagogy because of its links with behavioural psychology (Diekelmann, 1993) and this is the term that will be used in this article.

A behavioural pedagogical approach became visible in midwifery syllabi by 1963, where aims and objectives were used in documents (Nurses and Midwives Board, 1963). Fifty years on, the midwifery curriculum continues to be stated in terms of learning objectives or learning outcomes (AUT University, 2012).

PROFESSIONALISATION OF MIDWIFERY AND THE INCREASED USE OF TECHNOLOGY

The period between 1970 and 1990 was distinguished by the convergence of some major influences on the way midwives practised and therefore in the way they were educated. Maternity care was marked by an increased use of obstetric technology, such as ultrasound scanning, electronic fetal monitoring, obstetric anaesthesia, and specialist neonatal paediatric care. At this time there were concerns that the six month St. Helen's programme was not adequately preparing new graduate midwives to understand and support the new technologies now being utilised to provide maternity care.

In 1970, the New Zealand Government invited Dr Helen Carpenter, a Canadian Nurse and World Health Organisation consultant, to undertake a review of nursing and midwifery education in Aotearoa, New Zealand (Papps & Olssen, 1997). In her report, Carpenter made the observation that nursing and midwifery education programmes had remained relatively unchanged since their inception, and that education remained outdated and unsuited to the needs of both students and health services. She stated that students were "trained to undertake activities in a certain manner rather than taught to think through the application of principles to different situations and to apply these in an appropriate manner" (Carpenter, 1971, cited in Allen, 1992, p. 31). To address this problem, one of the recommendations that Carpenter made was that nursing and midwifery education shift from being based in a hospital setting to a polytechnic (tertiary) institution, and that midwifery become a postgraduate nursing specialty in maternal and infant nursing (Allen, 1992).

Carpenter's report, along with the need for midwives to be competent with advancing technology, ultimately resulted in midwifery education being moved to polytechnics. The length of midwifery education in the polytechnics was increased from six to 10 months, and the course was only available to registered nurses. Students attended classes alongside registered nurses and midwives who were studying for an Advanced Diploma in Maternal-Infant Nursing. Some classes were specifically developed for student midwives to prepare them for midwifery practice and the final state midwifery examination. In the polytechnics, although the course was longer (10months), student midwives had less practical experience than they had had at St. Helens hospitals with only 10– 12 weeks being spent gaining practical experience.

At the same time that midwifery education was moving into the tertiary setting, social changes were affecting the way that childbirth was perceived. Authors such as Suzanne Arms (1975), Danaë Brook (1976), Frederick Leboyer (1975) and Ina May Gaskin (1978), challenged the 'medicalisation' (increasing use of technology) of childbirth and promoted 'natural birth'. Questions about the importance of the time around birth resulted in women demanding a more emotionally satisfying and family-centred birth experience (Parents Centre New Zealand, 2009). It was argued that not only did midwives need knowledge about the technology used in obstetrics; they also needed the knowledge to attend to the woman's emotional experience.

With midwifery education's move from the practice setting of St. Helens hospitals to the academic setting, knowledge acquired through research findings, journal articles and textbooks became more valued than knowledge gained through experience and practice. The position was also established that theoretical knowledge was required prior to students going into the practice setting. This was different from the St. Helens training which was composed primarily of practical experience, supplemented with one day of lectures each week over a 6 month period.

The midwifery classes were smaller in the polytechnics, and learning theories of the time such as Knowles (1990) theory of adult learning and Kolb's (1984) experiential learning cycles influenced the pedagogical approach. Teaching and learning in the polytechnics comprised more small group work, discussions and interactive learning than had occurred at St Helens.

The change to midwifery education through the Advanced Diploma in Nursing (A.D.N.) was problematic and resulted in fewer midwives being trained in New Zealand, leading to a shortage of midwives. The six month St. Helens courses had trained between 157 and 185 midwives per year, whereas in seven years the A.D.N. had produced only 179 midwives (Guilliland & Pairman, 2010). There were also concerns that midwifery education had become too theoretical and was being subjugated by medicine and nursing. Midwives and women's groups became increasingly motivated to re-establish midwifery as a separate profession with an education programme distinct from nursing (Donley, 1986). The pathway to midwifery through the A.D.N. lasted less than ten years.

THE POLITICISATION OF MIDWIFERY AND THE DEMAND FOR AUTONOMY

When midwifery education moved from hospital-based education to the polytechnics, concerns about the adequacy of midwifery education was raised by groups such as the Midwives Special Interest Section of the New Zealand Nurses Association (1978), the Direct Entry Midwifery Task Force (Save the midwives direct entry midwifery task force, 1990), Parents Centres, Home Birth Associations, and midwifery educators (Guilliland & Pairman, 1991). The consumer and midwives groups

argued that midwifery had been downgraded to obstetric nursing rather than preparation to be a midwife, and that this was in part, due to the education provided through the A.D.N.

As a result of these groups lobbying government, a parliamentary committee was set up in 1986 to report on midwifery in New Zealand (Women's Health Committee, 1986). A considerable number of submissions raised issues related to midwifery training; in particular that direct entry to midwifery was desirable (rather than only after having completed nurse training), that there should be more practical experience, and that the course length be extended. The report of the Women's Health Committee added impetus for the major reforms which occurred in midwifery practice and education between 1989 and 1992. In this short space of time, midwifery was separated from the A.D.N and a one year diploma in midwifery for registered nurses was offered for three years at the polytechnics (Auckland Technical Institute, 1989) until a three year direct entry midwifery programme was commenced in 1992.

During the 1980s, there were moves by midwives and women's groups to increase the midwifery scope of practice, so that midwives could regain the legal right to take full responsibility for maternity care. The Health Minister of the Labour Government, Helen Clark, was sympathetic toward midwifery autonomy. She supported the legislative processes that culminated in 1990 with an amendment to Section 42 of the 1977 Nurses Act. This amendment allowed midwives to take full responsibility and claim payment for providing maternity care. An amendment to section 39 of the Nurses Act allowed for the introduction of three year midwifery programmes, known as Direct Entry Midwifery, because nursing registration was no longer a pre-requisite for midwifery study.

In 1992, the first three year Diploma in Midwifery was offered at the Auckland Institute of Technology and a three year Bachelor of Midwifery at Otago Polytechnic (Pairman, 2006). By 1997, midwives could study for a stand-alone Bachelor's degree at five polytechnics in New Zealand. Between 1977 and 2003, midwives continued to be registered by the Nursing Council of New Zealand (Nurses Act, 1977). As well as meeting the Nursing Council's requirements for registration, midwifery undergraduate programmes were also obliged to meet another set of requirements which were set by tertiary institutions. For example, to fit in with the diploma and degree system, midwifery curricula separated knowledge into discrete modules (later called papers by some institutions). Each module had an aim, learning outcomes, specified content and assessment requirements. Each was worth a certain number of credits and had to be passed before a student could move on to the next module (Auckland Institute of Technology, 1994, 1997). Modules were either theoretical or clinical. The pedagogy that now dominated midwifery education suggested that to learn midwifery, students needed to study a series of individual subjects, each with predetermined learning outcomes. Learning experiences were designed by a teacher around the learning outcomes and at the end of the module were assessed by that teacher. If the student passed the assessment, she was deemed to be able to progress on to the next subject.

With the legislative changes, which allowed for midwives to take full responsibility for women's maternity care, and the commencement of the three year midwifery degree programme, the imperative to ensure that midwifery students were taught 'everything' they needed to know to practise safely, became even stronger. To meet the demands of increased knowledge required for the increased scope of practice of a midwife, curricula development was characterised by the addition of increasing amounts of content, teaching of more skills and competencies. Along with larger class sizes, efficient teaching approaches such as lectures, multi-media presentations, and online learning tended to predominate.

Although the main influences on midwifery education came from within New Zealand, the tertiary education sector was following an international trend in which education became increasingly viewed as an economic industry (Malcolm & Tarling, 2007). When an economic view of education prevails, teachers and students may see learning as merely the acquisition of knowledge, skills and competencies, so that education is seen as more of a possession than a process. The priority of midwifery students in this context may be to attend a university to get a degree rather than to become a midwife. The impact of an economic approach on midwifery education is that the student outcomes are viewed as the measurement for the success of the programme, rather than the pedagogical approach, or how the learning happened.

The idea of competence to practise has also impacted on pedagogy.

Another influence on the pedagogic approach was the call for economic efficiencies with more students equating to more income for the institution. Technology became available which supported online learning thus students in provincial areas could access midwifery courses from their home base. With midwifery being a women-dominated profession, by providing courses within the provinces, the polytechnics supported women to stay in these areas for practice. Midwifery programmes in New Zealand quickly implemented distance-learning methods to support 'satellite' programmes for the provincial areas. This commonly involved the use of video-conferencing technology within the classroom setting so lectures could be viewed by distance students. These developments changed how midwifery teachers were able to teach. Large groups and online learning can lead to more formal ways of imparting knowledge being used and teaching becoming less interactive. Economic drivers led to less time to share stories and experiences because of the pressures to cover content and provide information to as many students, in as short a space of time, as possible.

COMPETENCE TO PRACTISE

The New Zealand College of Midwives (NZCOM) had long held that a separate regulatory body for registering midwives would more clearly define midwifery as a profession separate from nursing (Guilliland & Pairman, 2010). In 2003, changes to the registering body for midwifery came with the Health Practitioners Competence Assurance Act (HPCAA) (2003). This allowed for the formation of a separate Midwifery Council responsible for approving undergraduate education programmes and registration requirements for midwives (Midwifery Council of New Zealand, 2004). In 2006, the Midwifery Council undertook a review of midwifery education (Midwifery Council of New Zealand, 2007a) consulting with midwives, midwifery teachers and midwifery schools. Many of the submissions to this review suggested that students needed more clinical experience. The review's recommendations resulted in revised standards for approval of pre-registration midwifery education programmes (Midwifery Council of New Zealand, 2007b).

The standards prescribed the theoretical content to be taught and the practice requirements to be completed. This included a longer programme (equivalent of four years) with increased clinical practice hours. The Midwifery Council also set down the pedagogical approach which schools of midwifery should take:

> *Theoretical content may be delivered through a variety of learning and teaching processes including online and face to face. These learning and teaching processes should promote self-responsibility, critical enquiry, autonomy, accountability, collaboration, integration, quality care, contextual understanding and life-long learning* (Midwifery Council of New Zealand, 2007b, p. 15).

The Midwifery Council standards emphasise the need to demonstrate competency to practise. The notion that 'a competent practitioner is a safe practitioner' was introduced under the HPCAA (Health Practitioners Competence Assurance Act, 2003), and has since become a dominant discourse in midwifery practice and education. The idea of competence to practise has also impacted on pedagogy. A pedagogical approach has emerged whereby students and practising midwives are assessed against competencies. For midwifery education a pedagogical approach is needed

Midwifery educators have always been cognisant that becoming a midwife is much more than acquiring knowledge and skills for practice.

which will define a competent midwife who has the knowledge and skills (the how) of practice, but also a practitioner who is able to know when, why and for whom, to apply those competencies in practice (Smythe, 2010).

LOOKING FORWARD TO NEW PEDAGOGIES FOR MIDWIFERY EDUCATION: NARRATIVE PEDAGOGY

Midwifery educators have always been cognisant that becoming a midwife is much more than acquiring knowledge and skills for practice. Narrative pedagogy is an approach which may promote additional strategies of learning that can more effectively prepare graduates for the increasingly complex nature of midwifery practice. This approach to teaching and learning is committed to the interpretation of teachers', students' and clinicians' narratives about their experiences in education and practice (Diekelmann & Diekelmann, 2009). Drawing on the work of Diekelmann (2001) and Swenson and Sims (2000, 2003), a narrative-centred curricular approach was introduced into AUT's midwifery programme in 2005. This approach emphasises the importance of students determining their own learning based on their interpretation of narratives, and teachers facilitating learning in tutorial groups rather than solely through lecturing.

Studies exploring narrative pedagogical approaches, have found that when a learning environment fosters interpretation of narratives, a space is created for dialogue, reflection and thinking about subject matter in a different way from the thinking which might happen in a lecture environment (Diekelmann & Diekelmann, 2000; Gilkison, 2011; McAllister et al., 2009; McGibbon & McPherson, 2006; Vandermause & Townsend, 2010). Gilkison (2011) found when midwifery teachers and students jointly shared, discussed and interpreted a narrative, that learning about the art of midwifery practice was enhanced. It was the emotional involvement students felt with the narrative, and the recognition of their own values and beliefs in relation to those of the narrator which helped them to see the women's perspective, a skill which could be taken into practice.

The ability to listen to women and interpret their narratives is one of the cornerstones of midwifery practice. A midwife needs to critically evaluate evidence, support alternative choices, reflect on her own practice, and make clinical decisions in a myriad of contexts, modifying the approach in the light of the woman's response. A narrative pedagogical approach to learning may support, enhance and model these skills so that the undergraduate is more easily able to do this in practice.

CONCLUSION

This exploration of the pedagogical approach to midwifery education in Aotearoa, New Zealand has shown that education has been influenced by many diverse factors such as political and social drivers, technology for childbirth, the educational environment and economic imperatives. Undoubtedly midwives have always learned about practice through sharing stories, but in terms of formal education those stories have been seen as examples rather than a recognised way of learning midwifery. The narrative pedagogical approach implemented at AUT values the learning which comes from narratives. An understanding of the prevailing pedagogy and its influences can help educators to consider the ways that new approaches, such as narrative pedagogy, can be implemented and sustained.

REFERENCES

Allen, N. (1992). *A framework for nursing and midiwfery education in new Zealand: A discussion paper prepared for the Vision 2000 committee.* Wellington: Vision 2000 committee.

Arms, S. (1975). *Immaculate deception.* New York: Bantam.

Auckland Institute of Technology. (1994). *Bachelor of Health Science Midwifery: The programme.* Auckland: Auckland Institute of Technology.

Auckland Institute of Technology. (1997). *Bachelor of Health Science (Midwifery): The programme.* Auckland: Auckland Institute of Technology.

Auckland Technical Institute. (1989). *Midwifery Course.* Auckland: Auckland Technical Institute Nursing Department.

AUT University. (2012). *Bachelor of Health Science (Midwifery) programme document.* Auckland: AUT University.

Brook, D. (1976). *Nature birth: Preparing for natural birth in an age of technology.* Blackburn, Australia: Penguin.

Clarke, A. (2012). B*orn to a changing world: Childbirth in nineteenth-century New Zealand.* Wellington, New Zealand: Bridget Williams Books.

Diekelmann, N. (1993). Behavioural pedagogy: A Heideggerian hermeneutical analysis of the lived experience of students and teachers in baccalaureate nursing education. *Journal of Nursing Education, 32,* 245-250.

Diekelmann, N. (2001). Narrative pedagogy: Heideggerian hermeneutical analyses of lived experiences of students, teachers and clinicians. *Advances in Nursing Science, 23*(3), 53-71.

Diekelmann, N., & Diekelmann, J. (2000). Learning ethics in nursing and genetics: Narrative pedagogy and the grounding of values. *Journal of Pediatric Nursing, 15*(4), 226-231.

Diekelmann, N., & Diekelmann, J. (2009). *Schooling, learning, teaching: Toward narrative pedagogy.* Bloomington: iUniverse.

Donley, J. (1986). *Save the midwife.* Auckland: New Women's Press.

Earl, R. W. (1961). Book review: Models of man: Social and rational by Herbert A. Simon. *Educational and Psychological Measurement, 21,* 244-246.

Gaskin, I. M. (1978). *Spiritual midwifery.* Summertown: The Book Publishing Company.

Gilkison, A. (2011). *Implementing a narrative-centred curriculum in an undergraduate midwifery programme: A hermeneutic study*. Unpublished doctoral thesis. AUT University, Auckland.

Guilliland, K., & Pairman, S. (1991). Midwifery education: A national perspective. *New Zealand College of Midwives Journal, 4,* 5-6.

Guilliland, K., & Pairman, S. (2010). Women's business: *The story of the New Zealand college of midwives 1986-2010.* Christchurch: New Zealand College of Midwives.

Health Department of New Zealand. (1945). *Midwifery syllabus.* Wellington: Health Department of New Zealand.

Health Practitioners Competence Assurance Act. (2003). *New Zealand Statutes. Wellington: New Zealand Government.* Retrieved from http://www.legislation.govt.nz/

Hill, A. A. (1982). *The history of midwifery from 1840 to 1979, with specific reference to the training and education of the student midwife.* Unpublished masters thesis. University of Auckland.

Immerwahr, D. (2008). The fact/narrative distinction and student examinations in history. *Society for History Education, 41*(2), 199-205.

Kalisch, P. A., Scobey, M., & Kalisch, B. J. (1981). Louyse Bourgeois and the emergence of modern midwifery. *Journal of Nurse Midwifery, 26*(4), 3-17.

Knowles, M. S. (1990). *The adult learner: A neglected species.* Houston: Gulf Pub Co.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, N.J: Prentice-Hall.

Lambie, M. (1956). *My story: Memoirs of a New Zealand nurse.* Christchurch: N.M. Peryer.

Leboyer, F. (1975). *Birth without violence.* London: Wildwood House.

Macgregor, M. (1973). *Petticoat pioneers: North island women of the colonial era.* Wellington: A.H. & A.W. Reed.

Makereti. (1986). *The old-time Maori.* Auckland: New Women's Press.

Malcolm, W., & Tarling, N. (2007). *Crisis of identity?* Wellington: Dunmore Publishing.

McAllister, M., John, T., Gray, M., Williams, L., Barnes, M., Allan, J., & Rowe, J. (2009). Adopting narrative pedagogy to improve the student learning experience in a regional Australian university. *Contemporary Nurse, 32*(1-2), 156-165.

McGibbon, E. A., & McPherson, C. M. (2006). Interpretive pedagogy in action: Design and delivery of a violence and health workshop for baccalaureate nursing students. *Journal of Nursing Education, 45*(2), 81-85.

Mein Smith, P. (1986). *Maternity in dispute: New Zealand 1920-1939.* Wellington: Government Printer.

Midwifery Council of New Zealand. (2004). *About the midwifery council of New Zealand.* Retrieved 24th September 2007, from http://www.midwiferycouncil.org.nz/main/about/

Midwifery Council of New Zealand. (2007a). *Pre-registration midwifery education - summary report.* Wellington: Midwifery Council of New Zealand.

Midwifery Council of New Zealand. (2007b). *Standards for approval of pre-registration midwifery education programmes and accreditation of tertiary education organisations.* Wellington: Midwifery Council of New Zealand.

Midwives Act. (1904). *New Zealand Statutes.* Wellington: Government Printer.

Midwives and obstetric nurses special interest section of the New Zealand Nurses Association. (1978). *Midwifery Quarterly.* Midwives and obstetric nurses special interest section of the New Zealand Nurses Association. Otago.

Neill, J. O. C. (1961). *Grace Neill: The story of a noble woman.* Christchurch: N.M. Peryer.

Nurses Act. (1977). *Nurses Act.* Wellington: Government Printer.

Nurses and Midwives Board. (1962). *Supplementary instructions for the education of midwives.* Wellington: Government Printer.

Nurses and Midwives Board. (1963). *Supplementray instructions for the education of midwives.* Wellington: Nurses and Midwives Board.

Pairman, S. (2006). From autonomy and back again: Educating Midwives across a century, Part 2. *New Zealand College of Midwives Journal, 34*(April), 11-15.

Papps, E., & Olssen, M. (1997). *Doctoring childbirth and regulating midwifery in New Zealand: A Foucauldian perspective.* Palmerston North: Dunmore Press.

Parents Centre New Zealand. (2009). *Parents centre's origins.* Retrieved 4/5/09, from http://www.parentscentre.org.nz/about/history.asp

Rimene, C., Hassan, C., & Broughton, J. (1998). Breastfeeding [Breastfeeding paper]. In Komiti Maori te Kaunihera Rangahau Hauora o Aotearoa (Ed.), *Ukaipo: The place of nurturing* (pp. 75-77). Dunedin: Komiti Maori te Kaunihera Rangahau Hauora o Aotearoa.

Save the midwives direct entry midwifery task force. (1990). *A discussion paper and draft proposal for a direct entry specialist midiwfery course.* Auckland: Save the midwives direct entry midwifery task force.

Smythe, E. (2010). Safety is an interpretive act: A hermeneutic analysis of care in childbirth. *International Journal of Nursing Studies*(47), 1474-1482.

Swenson, M., & Sims, S. (2000). Toward a narrative-centered curriculum for nurse practitioners. *Journal of Nursing Education, 39*(3), 109.

Swenson, M., & Sims, S. (2003). Listening to learn: Narrative strategies and interpretive practices in clinical education. In N. Diekelmann (Ed.), *Teaching Practitioners of health care: New pedagogies for the health professions* (Vol. 2, pp. 154-193). Madison: University of Wisconsin.

Tyler, R. (1942). General statement on evaluation. *Journal of educational research, 35,* 492-501.

Tyler, R. (1949). *Basic principles of curriculum and instruction.* Chicago: University of Chicago Press.

Vandermause, R. K., & Townsend, R. P. (2010). Teaching thoughtful practice: Narrative pedagogy in addictions education. *Nurse Education Today, 30,* 428-434.

Women's Health Committee. (1986). *Midwifery: A discussion paper.* NZ Government, parliamentary committee. Wellington.

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BOOK REVIEW

Nursing and Midwifery Research methods and appraisal for evidence-based practice 4th edition

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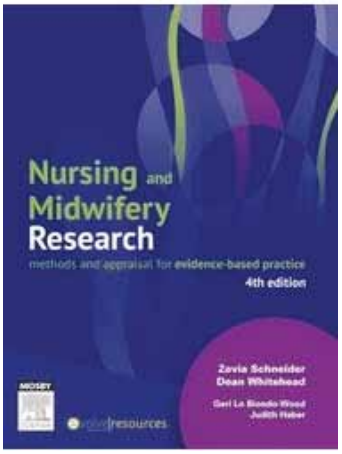

This is the fourth edition of this Australasian research textbook aimed at nurses and midwives who are studying at either undergraduate or post graduate level. The book provides a comprehensive guide to research methodologies and research processes along with detailed guidance about the different ways of undertaking research and advice on how to critically review research studies. There is a detailed discussion about qualitative, quantitative and mixed methods research approaches and a section for those who are considering conducting research themselves along with guidance on writing proposals and managing a research project. The book has a strongly Australasian perspective, and cites studies throughout each chapter as a way of demonstrating the differing research methods. One small criticism is that the book is strongly focused on the nursing audience with midwifery considered more as an addition rather than a focus. As such there are fewer midwifery research projects highlighted and none that I could see discussing New Zealand midwifery research. This may be a reflection of the context and philosophy of nursing in Australia or of the authors/editors in which midwifery is considered an extension of nursing rather than a separate profession. Other than this the book is well set out and easy to read, it has many useful features throughout each chapter such as points to ponder, tutorial triggers, and boxes summarising research projects. For midwives who are new to research this book provides a useful overview of the various elements of undertaking research and highlights the importance of research to support evidence based practice

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1. Mandel KG, Daggy BP, Brodie DA *et al.* Review article: alginate-raft formulations in the treatment of heartburn and acid reflux. Aliment Pharmacol Ther 2000 ;14: 669-690. 2. Uzan M *et al.* Heartburn and regurgitation during pregnancy. Efficacy and safety of treatment with GaviconLiquid. Rev.Fr.Gynae.Obstet. 1988; 83(7-9); 569-572. 3. Chevrel B (1980). A comparative crossover study on the treatment of heartburn and epigastric pain: Liquid Gaviscon and a magnesium-aluminium antacid gel. J Int Med Res; 8(4): 300-302.

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