PLACENTAL BIRTH: A HISTORY

By

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Abstract

This mixed method historical research uses both written material and topical oral history interviewswith medical and midwifery practitioners, to offer a signal contribution to midwifery knowledge. It fills a void in midwifery history concerning the management of the birth of the placenta. Because placental birth is not a discrete entity but is part of the birth continuum, the research has also contributed to the historical knowledge of birth in seventeenth and eighteenth century Britain and Europe and Maori birthing prior to European settlement. It also illuminates birthing practices and their contexts for both Maori and European from the early nineteenth century to the present day.

In the early years of the twentieth century a 'cause and effect' cycle of three synergistic and catalytic factors, medicalisation, hospitalisation and nursification produced clinical and political changes that created a weave into which changes to the management of the birth of the placenta could be woven.

It took time for modern midwives practising alternative birthing to unlearn their medicalised training and regain their trust in women's ability to birth. The reintroduction of midwifery autonomy and the passing of legislation concerning consumer choice and consent in health care facilitated the introduction of alternative midwifery practices into hospitals, exposing more midwives and doctors to physiological placental birth.

A theoretical model based on comparative obstetrics and reproductive physiology was used to analyse the management of placental birth over time, and in the varying contexts studied. This model is offered as a tool for clinical decision-making, and for educating women and maternity practitioners in facilitating the birth of the placenta.

This New Zealand research supports the use of physiological placental birth, in well women having normal pregnancies and labours, as safe and beneficial to women and their babies.

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My final acknowledgement goes to my family who I love and value. Your moral and practical support has been wonderful. I am blessed.

This thesis is dedicated to all women who have suffered complications birthing the placenta.

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Glossary

General Glossary

accoucheur……	birth attendant – usually midwife or doctor, pertains to the woman lying on a bed.
afterbirth, after-burden……	lay terms for placenta and membranes
amniotic fluid……	the 'waters' surrounding the baby in the womb
atony, atonic (adj.)……	without muscle tone – the muscles not contracting efficiently
boken……	vomit (archaic)
breech birth……	baby being born with buttocks or feet presenting first, rather than the normal 'head first' birth.
caule……	term for the membranes surrounding the baby and the amniotic fluid in womb
crotchet……	hook used to extract a dead baby from the womb.
flooding……	haemorrhage
inertia……	inactive – muscles remaining at rest, not contracting.
inverted……	turned 'inside out'
pains……	uterine contractions
uterus……	womb
funis……	umbilical cord
foetid……	bad-smelling
liquor amnii……	amniotic fluid
lochia……	vaginal discharge following birth
malpresentation……	also termed 'cross-birth' – a baby lying in the uterus in an abnormal position that could prevent it from being born successfully
manual extraction or removal……	using the hand to part the placenta from the uterine wall and to remove it from the uterus
menarche……	The onset of menstruation
navel……	umbilicus
navel string……	umbilical cord
puerperal sepsis……	childbirth fever, uterine infection

putrid……	rotten
rachitic……	suffering from the deficiency disease Ricketts
secundine……	name for placenta and membranes (archaic)
sepsis……	Infection
supine……	lying flat on back - recumbent
swaddling……	wrapping or bandaging a baby tightly
Thrombosis(es)……	blood clots within the blood vessels
turgescence……	filled with blood making less tissue flexible
uterine inversion……	womb turned 'inside out'
vascular……	pertaining to the blood vessels, veins, arteries or capillaries.

Glossary of Maori Words

Note: Many Maori words have different levels and nuances of meaning and are not easily translatable to English. This glossary has been kept very simple. Meanings as close as possible to those required by the context of the thesis have been used.

Aotearoa……	Maori name for New Zealand, 'the land of the long white cloud'
Arawa……	a North Island Iwi
aroha……	love, empathy
ewe……	umbilical cord
epuwhenua……	container for the whenua
hapu……	sub-tribe(s)
Hinauri or *Hine*……	the demigod Maui's sister.
Hineteiwaiwa……	another name for *Hinauri* or *Hine*
iho……	part of the umbilical cord
karakia ……	incantation, chant, prayer(s)
kainga……	settlement, group of houses(es)

kohanga……	nurture, nest(s)
kuia……..	respected older woman/women
Kupe…….	A Polynesian seafarer said to have discovered and named Aotearoa
makahakaha……..	coastal plant
makatu……	sorcery
mana……	power, standing, reputation
marae…….	Māori community facilities that usually include a carved meeting house and a sacred space in front of the meeting house. Marae also are symbols of tribal identity and places of 'belonging'.
Maui……..	the demigod that 'fished up' the North Island
mauri……	life-force
moko/mokopuna……	descendants, grandchildren
pa …….	defensive fortification(s)
pakeha……..	person(s) of European descent
parapara……	blood and blood clots
pito……	the maternal end of the umbilical cord
rangitira ……	leader, chief(s)
raupo……	a plant that provided leaves used in building
tangata……..	people
tangata whenua……..	people of the land
tangihanga……..	funeral(s)
tapu……..	sacred,
tairo ……..	thorny obstructions
Te Waipounamu ……	the South Island

tikanga…….. protocols, knowledge of

titoki …… a tree (Alectryon exelsus)

tohunga…….. expert(s)

Tuhoe…… a North Island Iwi

u…….. breast(s)

urupa…… burial ground(s)

wai…….. water, fluid, health, wellbeing.

wai u…….. breast milk

whakawhanau…… childbearing, birth(s)

whanau…… family(ies)

whare…… house(s)

whare kohanga ……..nest house(s)

whare tangata……..the womb (house of the people)

whenua……land, earth, placenta(s)

List of Abbreviations

AIMS	Association for Improvement to Maternity
AJHR	Appendices to the Journal of the House of Representatives
BMA	British Medical Association
CEO	Chief Executive Officer
DHB	District Health Board
FIGO	International Federation of Gynaecologists and Obstetricians
GP	General Practitioner
ICM	International Confederation of Midwives
IM	Intramuscular
IV	Intravenous
LMC	Lead Maternity Carer

MA	Master of Arts
MMPO	Midwifery and Maternity Providers Organisation
NZ	New Zealand
NZMA	New Zealand Medical Association
NZNA	New Zealand Nurses Organisation
NZCOM	New Zealand College of Midwives
PPH	Postpartum haemorrhage
RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
RCT	Randomised controlled trial
WHO	World Health Organisation

Preface: Two Red Buckets

> At a midwifery gathering, possibly a New Zealand Nurses' Conference, circa 1986, I met a midwife. She whispered to me while we were in the toilets, "I'm using a red bucket for the placenta."
> I said, whispering too so any other nurses or midwives wouldn't hear, "What? How do you use a red bucket?"
> "I get them to sit on it."
> "What do you mean? Sit on it?"
> "They sit on it and you do nothing! Sometimes you get the baby to suckle!"
> That was when I realised there was another way.[1]

This story from Ruth, illustrates the challenge and anxiety that was, and still is, associated with practising midwifery differently. Her story reminded me of how much courage was required from the domiciliary midwives, and the doctors who supported them, to practice contrary to the hospital norms after homebirth re-emerged in the 1970s.[2] It also reminded me of another red bucket.

Two Births

In 1991 I attended a birth in a small Aotearoa New Zealand town. A midwife colleague asked me to attend as she was at another birth. "You won't get there in time for the birth," she said, "They always call too late, but they want you there 'just in case'. They don't want you to interfere, just ask them what they want you to do." Thinking that this was rather unusual, I nevertheless dutifully attended the birth. On arrival I saw that the baby was indeed born. Mother was sitting on a mattress on the lounge floor surrounded by her children and helpers, happily breastfeeding her baby. After exchanging greetings, I learned that the placenta had not arrived, but this was not a concern, could I please go into the kitchen and have a cup of tea with 'Aunty'. With some misgivings, I went, reminding myself that all was normal. I was in the kitchen for quite some time, now and again popping out to check that mother and baby were pink and healthy looking. After an hour, the parents decided they would cut the umbilical cord and that I could check the baby. After doing so, I tentatively suggested that as the placenta had not yet been born, the woman

[1] R. Martis, Personal Communication, Auckland, 2008.

[2] M. Banks, Unpublished PhD Thesis, Out on a limb: the personal mandate to practise midwifery by midwives of the Domiciliary Midwives Society of New Zealand (Incorporated), 1974-1986, Victoria University of Wellington, Wellington, 2007.

might like to try sitting on the toilet with a receptacle inside it as sometimes that could help the placenta to come. I then returned to 'Aunty' in the kitchen. A few minutes later the couple walked past the kitchen door on their way to the toilet, armed with a red plastic bucket. Another few minutes had passed when they returned, placenta and membranes nestled in the bucket. It was now at least an hour and a half since the birth of baby so I was happy to see the afterbirth.

There had been no fuss, no drama, a normal healthy birth in the privacy of their home. This was how this Maori family preferred to birth. Their confidence in their ability to birth a child naturally, gave them the strength to remain in control of the event. I drove the twenty kilometres home feeling that I had been part of something quietly dignified and special, and reflecting on how difficult and yet fulfilling it had been to stand back and not 'take over'.

Within twenty-four hours I attended another birth. This was also a Maori woman birthing, but this time in the small maternity hospital in a different town. The woman was on her back on the birthing bed, and I was the sole midwife on duty with a hospital aide to help me. The General Practitioner who was looking after the woman was on his way but the baby decided to be born before his arrival, quite normally. I gave the routine intramuscular injection of syntocinon straight after the birth of the baby. Gentle controlled umbilical cord traction was commenced but the thin cord avulsed from the placenta with the first moment of applied tension, just as the doctor came in the door. I asked him whether I could put the woman onto a bedpan to help her to expel the placenta. There was no bleeding and the woman was quite well. "No", he said, "we have to get it out before the cervix clamps down". He put on sterile gloves and without further ado proceeded to manually remove the placenta before I even had time to give the woman some Entonox[3] to reduce her pain.

The woman looked shocked and began to bleed. An intravenous line was hurriedly inserted and intravenous ergometrine was given. The uterine fundus was massaged and the bleeding stopped. The woman thanked the doctor for his care, and the doctor thanked me for my help before he left. I felt as though the woman had been raped, although by a very caring and well-intentioned doctor who believed that what he had done was absolutely necessary. There was an immediate

[3] A mixture of nitrous oxide and oxygen used for inhalational analgesia.

'gut feeling' of wrongness about what had occurred, although the woman was happy, grateful that she had been 'saved'. I had been exposed to this style of management before, perhaps not as dramatically, and had in the past accepted it as a necessary evil.

Reflection on practice

The huge disparity between the two births gave me much cause for reflection. I thought that had I not pulled on the cord there may not have been such a dramatic, painful and shocking experience for the woman. Although I had been trained to actively manage the birth of the placenta and had routinely done so for the previous twelve years, I remembered the feelings of revulsion I had when I first saw a managed placental birth as a young student nurse. I remembered that I had then wondered why, if a woman could expel a baby, she could not also expel her placenta. I had always been told that the medical approach was the safest, but there did not appear to be any actual explanation as to why and how the medical approach had come about and why it was considered the safest method of care. I had heard older midwives saying that doctors had needed to find a way of speeding up the birth of the placenta because it took too long, and that doctors didn't have the patience (or the time) to wait for nature to take its course. I wondered whether there was an element of truth in that story. I reflected that much practice that we had accepted as routine and necessary had been shown to be unnecessary, for example, enemas and genital shaves, routine episiotomies and the highly managed 'deliveries' of babies where pressure was exerted to flex the baby's head during the birth.

Placental birth, naturally

As a result of these two experiences, over the next decade while practising in hospital, in a birthing unit and at homebirths, I became interested in the differences between the two methods of managing placental birth. As a practising independent midwife, caring for my own clients, I offered women the choice of active management or physiological birth of the placenta and advised women according to their clinical needs. Many of the hospital midwives found it difficult when I used the physiological approach in hospital. They considered it to be unsafe. I was supported by the women requesting it, and by other like-minded midwives, usually those who practised homebirth.

Botha's comments, written in the 1960s about the African Bantu came to my attention.[4] He wrote that the women birthed in a squatting position and did not touch the umbilical cord until after the birth of the placenta. He stated that these women very rarely suffered from retained placenta or postpartum haemorrhage (PPH). I, and other midwives, responded to this information by incorporating into our practice the idea of not clamping or cutting the cord. We discovered that by doing this we gave the woman uninterrupted time with her baby, and found that it was quite easy to get the cord blood from the placental surface later if blood from the umbilical cord was required for testing. We saw the benefits to the mother of her getting to know her baby immediately without the interruption of the managed birth of the placenta, My colleagues and I came to prefer the more peaceful and naturally progressed birth.

We learned by trial and error. We learned that the best way to facilitate the natural birth of the placenta was to leave the baby and the mother to get to know each other without interference. I learned, against all my training, to take my gloves off following the birth of the baby. This was so that I would not 'fiddle' with the cord trying to see if the placenta had separated. The stance chosen was of relaxed but watchful unobtrusiveness. I had learned from Michel Odent and Joan Donley, and from older midwives earlier in my career, that fear and anxiety are the "enemies of normal birthing."[5] I decided that midwives had to be careful not to portray anxiety during a physiological placental birth or if bleeding occurred. Reading Buckley some years later confirmed this and helped me to understand the underlying hormonal dynamics.[6]

With the rush and bustle and clinical imperatives of a busy hospital, facilitating the woman's hormonal and physiological responses can be forgotten. Yet supporting women's physiology has the potential to reduce PPH, and to lessen the amount of blood loss experienced by women. When circumstances prevent the facilitation of normal birth and do not support the woman's own

[4] M. Botha, The management of the umbilical cord in labour, *South African Journal of Obstetrics and Gynaecology, Vol. 6,* 1968, pp. 30 – 33.

[5] J. Donley, in Auckland Homebirth Association, Welcome Home Birth Video, Auckland, 1989.

[6] S. Buckley, *Gentle Birth, Gentle Mothering*, One Moon Press, Brisbane, 2005; S. Buckley, Undisturbed birth – nature's blueprint for safety, ease and ecstasy, *MIDIRS Midwifery Digest, Vol. 14,* No.2, 2004, pp. 203-209; S. Buckley, Labour and birth, What disturbs birth?, *MIDIRS Midwifery Digest, Vol. 14 No. 3,* 2004, pp. 353-359.

hormonal processes, then the active medical method of birthing the placenta has an unquestioned role in reducing haemorrhage.

Thesis Structure

The thesis is structured in three parts. The first part is composed of Chapters One and Two. This section provides contextual and methodological background to the current study. Chapter One relates how the topic came to be chosen. The impetus for the research stemmed from reflection on midwifery practice, and midwifery philosophy. The chapter identifies the research question and its subsidiary questions and discusses how they were formulated. The maternity context for the study is described and the aims of the research toward improving midwifery knowledge and interdisciplinary understanding are stated. The relationship of this historical research to current epistemological debate is elaborated. The chapter finishes with a review of literature, touching on issues of professionalisation and gender, but mostly concerned with the management of the third stage of labour, establishing that the current research has not been undertaken previously.

Chapter Two details how the study was planned and carried out. It is a mixed method study using historical inquiry to locate and examine the written material sources with the addition of topical oral history interviews as an integral element. The search for data including the location and selection of written material sources is related. How the oral history portion of the research was planned and executed is explained with emphasis on the ethical considerations, and the selection and interviewing of the participants. A theoretical model for data analysis was developed from theories elicited from comparative obstetrics and research into hormonal reproductive processes. The model utilises those theoretical factors that support and facilitate physiological birth combined with factors long recognised in midwifery practice as influencing placental birth.

The second part is comprised of Chapters Three, Chapter Four and Chapter Five, and answers the subsidiary research question: *What was the foundational knowledge of placental birth in New Zealand in the eighteenth and nineteenth centuries?* Primary and secondary texts are used to identify and describe the knowledge and practices within their contexts. These are analysed using the lens provided by the theoretical model, as developed in Chapter Two.

Chapter Three outlines medical epistemology in the seventeenth and eighteenth centuries; it identifies and describes the birthing knowledge and practices that came to New Zealand with the early settlers, the majority of whom were British. Two knowledge streams are identified; traditional women's midwifery practice and 'man-midwifery' which was rising in popularity and was to become firstly 'medical midwifery' and then the discipline of obstetrics.

Chapter Four traces the medical management of the birth of the placenta through the nineteenth century. Textbooks from Britain and America guided medical practice in New Zealand. These books accompanied their owners to their new country, or were imported by practitioners. The books and articles from professional journals yield insights into medical thought, experimentation and changes in medical maternity practice over the century.

Chapter Five is concerned with contexts, major influences and actual birthing practices including changing patterns of maternal mortality, in eighteenth and nineteenth century New Zealand, for Maori, and for European settler women. The third foundational knowledge stream, Maori birthing knowledge and practices prior to European settlement are identified and analysed. European settlement changed the contexts in which birthing for European and for Maori occurred. The strengthening influence of medical midwifery is demonstrated in a case study of a complicated birth. Both Maori and European women suffered social and cultural dislocation and had to adapt their birthing practices to their 'new world'. Maori were severely affected by colonisation, but both groups' birthing practices were changed and adapted to their new environments.

Part Three, comprised of Chapters Six, Seven, Eight and Nine answers the second subsidiary question: *What factors changed the foundational knowledge to create the practices that are used in today's world?* This section is concerned with the evolution of the management of the birth of the placenta from the beginning of the twentieth century. The chapters are informed by medical and midwifery textbooks, articles from professional journals, case records, and also by the testimonies from the oral history interviews with maternity practitioners.

Chapter Six begins in 1900, a natural starting point that follows the precedent of previous chapters. Using textual sources the chapter shows that medical men were educating the midwives into the 'medical' midwifery model of care, so by the beginning of the twentieth century books for

midwives were being written either by doctors or doctor-midwife combinations. It outlines how the medical profession regulated and increasingly controlled midwifery, and hospitalised and medicalised birthing, while they 'controlled' the uterus with the help of ergot and pituitary extract.

The development and universal adoption of the prophylactic use of active management of the third stage of labour are discussed in Chapter Seven. It analyses the change from the use of observation and patience by the accoucheur to practitioners actively managing the birth of the placenta, a process that was dependent on the availability of reliable and effective uterotonic drugs. It describes how these became available at a time when medicine was making great strides in its ability to cure and prevent disease; a climate in which the use of these drugs was readily accepted. The medicalisation and hospitalisation of birth, the subordination of midwifery, clinical practice and the use of the new uterotonic drugs, intertwine in the story of how active management of the birth of the placenta became so embedded into birthing that by the 1970s it was regarded by many practitioners as 'normal'.

Chapter Eight details the re-emergence of physiological placental birth. The chapter outlines the practices, and analyses the contexts for the re-emergence of physiological placental birth as an option for women. Beginning with the increasing demand from women for homebirths, it describes the socio-political environment that supported midwives to offer alternative childbirth practices, even within those 'bastions of medical power', the hospitals.

An overview of the midwifery and medical experiences and opinions that were expressed by the participants is provided in Chapter Nine. The first section relates to the demographics of the participants, while the sections that follow examine the answers to the interview questions, Material that was extraneous to the interview guideline but relevant to the current study is also considered. Themes identified from the commonalities and differences in the oral data were analysed, and are presented as the last section of the chapter. Practitioners' ideas and thoughts about the management of placental birth and their experiences with it are the main focus of the chapter. The Conclusion, where the thesis findings are presented and argued, completes the thesis, and is followed by the Bibliography and Appendices.