Women’s Attitudes to and Experiences of Osteopathic Care during Pregnancy

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ABSTRACT

Background: Osteopathic literature on the topic of women's health during pregnancy is limited. Current literature explores the possibilities of osteopathic intervention but lacks supportive research. This project is a first step towards extending the literature available by exploring the attitudes and experiences of women to osteopathic care during pregnancy.

Objective: To identify and explore significant issues associated with the attitudes and experiences of women to osteopathy during pregnancy. To investigate possible relationships between osteopathic treatment and quality of life during pregnancy and the childbirth experience.

Methods: This retrospective study employs a phenomenological qualitative approach. Participants were recruited through purposeful sampling. Seven women who had experienced osteopathy at least three times during their pregnancies and given birth between 6 weeks and 12 months prior were interviewed to explore their attitudes to and experiences of osteopathy during pregnancy.

Results: It was found that the following factors influenced the women's attitudes to and experiences of osteopathy during pregnancy: (1) The accessibility of osteopathic care, (2) Quality of life, (3) Security during a period of change and uncertainty in life, and (4) Making sense of the experience.

Conclusions: Osteopathy during pregnancy was found to be an effective treatment in reducing or ameliorating pregnancy complaints and was not perceived as being any different to osteopathic care when not pregnant.
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¹ Participant pseudonyms.
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KEY TO TRANSCRIPTS

Participant quotes are both italicised and use double quotation marks to easily distinguish them from academic quotes that use only double quotation marks. Citation of participant dialogues include the participant’s pseudonym, transcript page and line numbers, and are in a smaller font so as not to detract from the quotation. The following key further explains text alterations.

…//… Break in quoted dialogue
...
/text/ Lengthy pause in dialogue
[text] Added or altered for clarification or privacy, i.e. [osteopath] to provide anonymity for the osteopaths mentioned

text Emphasis on word as expressed by participant

DEFINITIONS

The following definitions were used during the data analysis process when examining the transcripts for the attitudes and experiences of the participants to the phenomena studied.

Attitude

“A settled opinion or way of thinking” or “behavior reflecting this.” “A highly independent or individual outlook” (Deverson & Kennedy, 2005, p. 65).

Experience

“Knowledge or skill acquired from the observation of facts or events.” “An event regarded as affecting one, the fact or process of being affected” (Deverson & Kennedy, 2005, p. 374).
“The thing that I really like about osteopathy is that it’s your body looking after your body, and it’s not saying that these things are wrong with you and we need to fix them. It’s just kind of giving your body the tools to fix itself, and giving it a point in the right direction.” (Ella, p. 3, lines 1-3)
CHAPTER ONE: INTRODUCTION
This study explores the attitudes to and experiences of osteopathic treatment during pregnancy. Women who had elected to have osteopathic care during their pregnancy were interviewed in order to gain further knowledge of the experience of osteopathic care and their attitudes towards this. The first chapter provides an outline of the study including the rationale for undertaking the study, alongside an introduction to the method used. Chapter Two presents and discusses the findings from the literature relevant to osteopathy during pregnancy and women’s health. Chapter Three and Four describe phenomenology as a research method and the application of this method to the project. Chapter Five presents the findings of this study and Chapter Six discusses these findings with reference to relevant literature. Chapter Seven concludes by evaluating the attributes and limitations of this project, includes suggestions for future research, and the implication the findings have for the osteopathic profession and the wider healthcare community who treat women throughout pregnancy.

INTRODUCTION TO THE TOPIC

It is becoming increasingly common for women to seek complementary and alternative therapies for alleviation of common complaints associated with pregnancy (Adams et al., 2009). These complaints can severely impact on women’s quality of life and in some cases affect their pregnancy and childbirth experience (Borggren, 2007; Olsson & Nilsson-Wikmar, 2004). Alongside this, anecdotal claims have been made that osteopathic treatment can decrease labour duration by ensuring that biomechanically, the pelvis is working effectively and is therefore more able to comply with the added demands of pregnancy and the infant’s descent (Borggren, 2007; King et al., 2003). This is thought to play a role in decreasing the need for interventions such as forceps and ventouse extraction. Identifying the attitudes and experiences of women who have experienced osteopathy during pregnancy will offer further information regarding the role osteopathic care played in their pregnancy and birth experience. Research into the effects of osteopathic treatment for this sector of the population is limited and it is hoped that by gaining insight into the attitudes and experiences of the women, valuable information will be added to current literature, providing a research base on which further studies may be conducted.
THE AIM

The aim of this study is to identify and explore the attitudes and experiences of women to osteopathic treatment during pregnancy and any relationships this may have with quality of life and the childbirth experience.

PERSONAL BACKGROUND

I have always had a great interest in pregnancy and as a child would look in awe at pregnant women walking down the street, unable to comprehend that a baby was growing inside their abdomen. This notion of one life developing inside another amazed me and although I now have an intellectual understanding of the physiological changes that take place during pregnancy, the capacity of the human body to adapt so much over a relatively short space of time still astounds me.

Part of my undergraduate course included study into the changes that occur during pregnancy. I was yet again amazed by this and found myself carrying out much more reading around the subject than was required. Although neither I, nor any of my close friends have experienced pregnancy, my cousin became pregnant with her first child shortly after these topics were covered in the course. Alongside the excitement of another life joining our extended family and the beginning of the next generation, I felt a great level of intrigue around the changes that my cousin's body was undergoing and her experience of such adaptations. This brought up much discussion around women's experiences of pregnancy and the impact pregnancy complaints can have. I found that most women had an experience to share, be it their own, or their perception of another’s. With the osteopathic knowledge I had gained I contemplated the experiences I had heard, noticing how some women appeared to take on pregnancy with ease, yet others seemed to express varying levels of debilitation.

I approached this project with an inquisitive mind and a desire to gain a further understanding on women's experiences of pregnancy and to see if I, as an osteopath, could aid them throughout this process. I also hope that this project can provide other healthcare providers who treat women during pregnancy with some helpful insight.
RATIONALE

At present, many women experience pregnancy complaints which have a direct impact on their roles in society, as a partner, mother, wife and work colleague (Westfall, 2003). By identifying and exploring the attitudes and experiences of women who have had osteopathic treatment during pregnancy more knowledge may be gained to help support women during this stage in their lives. While it is anticipated that many participants will find osteopathic treatment beneficial for the relief of pregnancy complaints and preparation for childbirth, more information on what a woman experiences and her interpretation of events should emerge from this study. Such acquired detail may encourage further studies, looking directly at the effects of osteopathic treatment on the relief of pregnancy complaints and the possible link between physical preparation for childbirth and birth outcomes. Women are in need of a wellness approach to pregnancy and childbirth which is safe, non-invasive and decreases the potential influence pregnancy complaints may have on interrupting everyday life, and reduces the need for interventions during labor (Melender & Lauri, 2002; Munch, 2011; Olsson & Nilsson-Wikmar, 2004). This may also have a direct effect on birth recovery of both the mother and infant.

THE METHOD

A qualitative method is appropriate for this project as little prior research in this area has been conducted, and therefore an exploratory approach is required. Furthermore, as the aim is to identify and explore the women’s attitudes and experiences, a two way interchange between participant and researcher is needed (van Manen, 1990). Due to the above-mentioned reasons, phenomenology was the research method used. Detailed description of the methodology occurs in Chapter Three, followed by an account of its application to the project in Chapter Four.
CHAPTER TWO:
BACKGROUND LITERATURE
This chapter covers a review of the literature with focus on three main areas: pregnancy, osteopathy, and the attitudes and experiences of women to prenatal healthcare. The prevalence and physiological basis of common pregnancy complaints are discussed in the pregnancy section, followed in the section on osteopathy by the history, current use and benefits of osteopathy during pregnancy. Finally the women’s experiences of, and attitudes to, prenatal healthcare are examined.

**Pregnancy**

This section looks at the prevalence of common pregnancy complaints followed by discussion of each complaint, including its physiological basis. Routine prenatal healthcare in New Zealand will then be examined alongside other prenatal healthcare options.

**The Prevalence and Wider Effect of Pregnancy Complaints**

Pregnancy is considered to be a “normal physiological condition” for fertile women and they are therefore expected to continue with work and other aspects of their life as usual (Olsson & Nilsson-Wikmar, 2004). However, for many women the pregnancy experience is affected by complaints such as lower back pain, heartburn, carpal tunnel syndrome and morning sickness (Stoppard, 2000). These complaints may seriously affect the ability of many women to continue with their current work and family responsibilities, as well as impacting on their general quality of life (Olsson & Nilsson-Wikmar, 2004). Current prenatal care is viewed as being crucial in ensuring good pregnancy outcomes (Novick, 2009). However, this care primarily focuses on biomedical issues, such as the blood pressure and weight of the woman, and the heart rate and growth of her foetus (Novick, 2009). Currently, little emphasis is placed on wellness care, such as the symptomatic relief of pregnancy complaints. Statistics show that “50% of employed women report reduced work efficiency [due to pregnancy] with as many as 25-66%... requiring time off work” (Hollyer, Boon, Georgousis, Smith, & Einarson, 2002, p. 2). Back pain has been reported to affect anywhere between 50% (Olsson & Nilsson-Wikmar, 2004) and 85% of pregnant women (Green, 2000), whereas nausea and vomiting has been reported to affect up to

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2 The terms 'prenatal' and 'antenatal' are both used to describe the period of pregnancy prior to childbirth. However, in order to be consistent with the literature, 'prenatal' is used throughout this thesis.
80% of all pregnant women at some point (Hollyer et al., 2002). These high figures suggest that wellness care is an area of great importance in ensuring a happy and healthy pregnancy. Alongside symptomatic relief, wellness care may include preparation for labour. This idea is further discussed in the section on osteopathy in this chapter.

**COMMON PREGNANCY COMPLAINTS**

This section discusses the most common and debilitating complaints associated with pregnancy and their current treatment options, followed by a discussion of the ways in which osteopathic treatment can help to support optimal physiological function and the effect this may have on pregnancy complaints. To date, there have been few studies regarding the efficacy of treatment for common pregnancy complaints. Studies that focus on ‘osteopathic care’ or ‘alternative therapies’ are also scarce and mainly concerned with backache.

**Back Pain**

As indicated above, back pain is one of the most common pregnancy complaints, affecting between 50% (Olsson & Nilsson-Wikmar, 2004), and 85% of all pregnant women. Lisi (2005) reports that only 32% of pregnant women disclose symptoms of lower back pain to their prenatal healthcare provider, and only 25% of providers recommend treatment. Predisposing factors include heavy manual labour, smoking, parity, age and previous history of lower back pain. Backache during pregnancy includes lower back pain and sacroiliac pain and is attributed to the biomechanical changes that occur during pregnancy. During pregnancy the lumbar lordosis deepens to compensate for anterior weight displacement due to the growing foetus. This increases the mechanical burden of the lumbar spine, resulting in increased stress across the vertebral facets and intervertebral disc spaces (Ward, 2003). Sacroiliac pain is also problematic and is thought to occur due to the pelvis tilting anteriorly in response to the expanding uterus. This is coupled with increasing mobility of the sacroiliac joint due to increased secretion of the hormones relaxin and progesterone, resulting in ligamentous laxity and therefore less stability. This results in the muscles having to ‘work harder’ to maintain stability, predisposing them to fatigue and microtrauma (Parsons & Marcer, 2006; Ward, 2003). Sacroiliac relaxation may result in pain radiating down the posterior thigh, or across the anterior aspect of the distal abdomen and thighs (Ward, 2003). Weight gain associated with pregnancy further increases stress on the sacroiliac joints (Borggren, 2007). Arab, Behbahani,
Lorestani and Azari (2010) measured the amount of bladder base movement in non-pregnant women using ultrasound as an indicator of the function of the pelvic floor. They found a statistically significant difference in the ultrasound measurements between the group of women experiencing lower back pain compared to those who were not, indicating a relationship between pelvic floor dysfunction and lower back pain. While they state that “ultrasound imaging has been established as an appropriate method for visualizing and measuring pelvic floor muscle function” although appropriate, it is not known how reliable this tool is for the measuring of pelvic floor muscle function (Arab et al., 2010, p. 235). Furthermore, all participants were non-pregnant women, so it is not known how applicable these results are to a pregnant population. Further studies are required to attempt to establish the relationship between pelvic floor muscle function and any relationship in lower back pain to pregnant women. Borggren reports that “there may be a relationship between back pain throughout pregnancy and a longer duration of the labour and delivery process” (2007, p. 71) highlighting that effective treatment for back pain may not only be important in maximizing women’s comfort during pregnancy, but in preventing longer labours. Increased duration of the second stage of labor (n > 3 hours in nulliparous and n > 2 hours in multiparous women) has been associated with increased risk to both maternal and perinatal outcomes. These risks include post-partum hemorrhage, birth depression, low Apgar scores at 5 minutes and admission to the neonatal intensive care unit (Allen, Baskett, O’Connell, McKeen, & Allen, 2009). These findings highlight the importance of reducing labour duration when it is safe to do so.

Current treatment for pregnancy-related back pain includes analgesic use such as paracetamol, heat or ice packs, rest and avoidance of lifting heavy objects. Supporting the lower back with pillows whilst seated and sleeping with a pillow between the knees are also recommended (Livermore, 2000). Further recommendations include: acupuncture (Wang et al., 2009) yoga, massage, chiropractic care and maintaining abdominal tone (Anderson & Johnson, 2005; Borggren, 2007; Livermore, 2000). Anderson and Johnson (2005) offer a review of the literature for the use of complementary or alternative medicine in obstetric-related complaints. A wide range of issues was covered, and critique included the number and size of studies alongside examination of potential bias. They concluded that ginger for nausea and vomiting in early pregnancy alongside perineal massage for the prevention of perineal trauma were among the most strongly supported claims. Exercise programmes throughout the second half of pregnancy have also been found to be effective in significantly reducing the intensity of lower back pain after exercise (Garshasbi & Faghih Zadeh, 2005) and improving both pain intensity and functional ability (Kluge, Hall, Louw, Theron, & Grové, 2011). Manual therapy has also been found to be of benefit. Chiropractic care is considered a safe and effective treatment for
musculoskeletal complaints during pregnancy (Borggren, 2007; Lisi, 2005) and osteopathic manipulative treatment has been found to reduce or halt the deterioration of lower back function (Licciardone et al., 2010). However, published literature regarding the effects of manual therapy is scarce and further research is needed.

Osteopathic treatment aims to relieve structural pain and tension of the back through various techniques such as hip rotation and traction, muscle energy technique and soft tissue release (Stone, 2007). It has been reported that osteopathic manipulative treatment can help even the most acute cases of backache (Stoppard, 2000), and osteopathic treatment during pregnancy has been shown to be successful in relieving backache (Sandler, 1996). The British School of Osteopathy reported that of 800 women treated for backache during pregnancy, greater than 70% reported improvements in their condition within three treatments. This ranged from some relief, to being symptom free (Hyde, 2009).

**Breathlessness**

Breathlessness is a common occurrence during pregnancy and does not always coincide with overexertion. It may be caused by: biomechanical changes, and the growing foetus pressing against the diaphragm - the primary muscle of respiration. This reduces the space available for its distension on inspiration. During pregnancy the diaphragm flattens and the lower ribs flare outward, causing widening of the costal angle and lifting of the sternum, increasing the chest circumference by 5-7 cm (Coulter, 2007; Parsons & Marcer, 2006). These physiological and biomechanical changes of the woman’s breathing pattern may result in feelings of breathlessness (Parsons & Marcer, 2006; Saladin, 2004; Ward, 2003). It is proposed that disordered breathing in pregnancy, such as snoring, is associated with adverse pregnancy outcomes and fetal wellbeing (Bourjeily, Ankner, & Mohsenin, 2011) as decreased circulating oxygen enhances fetal erythropoiesis³ (Tauman et al., 2011), highlighting the importance of optimal breathing during this stage of life.

Currently, avoidance of over exertion is recommended, as prevention is seen as being the best option, due to few intervention options. Contradictory to previous findings, Jensen, Webb, Wolfe and O’Donnell (2007) found that despite substantial mechanical adaptations of the respiratory system to accommodate the growing gravid uterus, neither pregnancy nor advancing gestation were associated with increased respiratory discomfort when compared with age-matched non-

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³ The production of erythrocytes: red blood cells (Saladin, 2004).
pregnant sedentary women. It is not known what fitness level the pregnant participants attained prior to participation in the study, however participation of regular strenuous activity was exclusive for participation in this small study.

Osteopathic treatment can be beneficial in ensuring that biomechanically the woman is adapting to the changes and demands her pregnant body now faces. Osteopathy can help by ensuring that the thoracic spine and ribs are moving adequately alongside stretching out primary and secondary muscles of respiration. This ensures that the thorax can adapt more efficiently to carrying a developing foetus, reducing breathlessness (Stone, 2007). As breathlessness is also a sign for serious pathologies, eliminating these possibilities first is essential (Longmore, Wilkinson, Turmezei, & Cheung, 2008).

**Carpal Tunnel Syndrome**

Carpal tunnel syndrome can occur in many situations. In pregnancy, it may be due to fluid retention causing localized oedema and swelling, especially at the extremities. The oedema increases the pressure in the carpal tunnel, affecting the median nerve, resulting in numbness, tingling and pain of the wrist and hand, most commonly at night. It affects 2%-25% of pregnant women (Lublin, Rojer, & Barron) although some authors report this figure to be as high as 62% (Ablove & Ablove, 2009). It is reported to occur most commonly in the second and third trimester (Stolp-Smith, Pascoe, & Ogburn Jr, 1998; Stoppard, 2000) and is twice as common in women who experience swelling of the fingers, preeclampsia and hypertension (Ward, 2003). Seror (1998) found that those experiencing pregnancy-related carpal tunnel syndrome had a higher incidence of persistent, painful diurnal symptoms than in those with idiopathic carpal tunnel syndrome. This highlights the importance of effective treatment in order to maintain quality of life during pregnancy.

Current treatment and advice includes raising the affected arm above the head, wriggling the fingers or using a wrist support/splint. Diuretics may also be prescribed to reduce oedema, and subsequently the pressure in the carpal tunnel (Stoppard, 2000).

Osteopathic treatment can help to reduce symptoms of carpal tunnel syndrome by working on the structures of the hand and arm. Manipulative, myofascial and stretching techniques to the carpal tunnel structures can be beneficial, alongside work focusing on the fluid drainage of the upper limb. This includes work on the clavical, thoracic outlet, cervicobrachial region and upper ribs, thereby decreasing swelling and oedema and reducing the pressure in the carpal tunnel.
(Stone, 2007). The affect of osteopathic treatment of carpal tunnel syndrome during pregnancy is not researched, with literature being opinion or anecdotal evidence based.

**Indigestion**

Indigestion is caused by stomach acid rising up the oesophagus and irritating the mucosa, resulting in a burning sensation behind the sternum. It is a combined result of the growing foetus compressing the stomach and the hormones relaxin and progesterone affecting the integrity of the gastro-oesophageal sphincter, allowing reflux to occur (Richter, 2005; Stoppard, 2000).

Current treatment and advice includes antacids, as well as preventative action such as decreasing the intake of fatty and spicy foods, having smaller, more frequent meals and eating at least three hours before bed (Stone, 2007; Stoppard, 2000; Wattis, n.d.). Proton pump inhibitors are reserved for cases where the above-mentioned therapy has been ineffective (Richter, 2005).

Osteopathic treatment may be beneficial, especially when used in conjunction with preventative action. Normalising diaphragm tone alongside work on mediastinal tension, the thoracic cage, rib mechanics and the autonomic balance of the stomach, are thought to help due to the changes within the abdominal and thoracic cavities during pregnancy (Parsons & Marcer, 2006). Visceral osteopathic techniques may be used to ‘pull’ the stomach inferiorly from the diaphragm. This, alongside visceral work on the integrity of the gastroesophageal sphincter, the lower oesophagus and intestines, are also thought to decrease reflux (Stone, 2007). It is thought that changes within the abdominal and thoracic cavities that occur during pregnancy can lead to mechanical tension at the cardia of the stomach, contributing to heart burn (Stone, 2007). The presence of heartburn and acid reflux is associated with an increase severity of nausea and vomiting during pregnancy (Law, Maltepe, Bozzo, & Einarson, 2010) and a decrease in the women’s wellbeing (Gill, Maltepe, & Koren, 2009).

**Nausea and Vomiting**

Nausea and vomiting during pregnancy affects 80% of pregnant women (Hollyer et al., 2002) whilst its more extreme form, hyperemesis gravidum affect 0.5-2% of pregnancies (Tan, 2011). Both forms have a large impact on women’s quality of life. Collectively, nausea and vomiting are commonly referred to as ‘Morning Sickness’, due to it affecting most women during this time of the day, possibly as a result of blood glucose levels being low due to overnight fasting. It
typically affects women in their first trimester, between 8 and 14 weeks, although some women experience nausea and vomiting for the duration of their pregnancy (Stables & Rankin, 2010). While the aetiology is not fully understood, it is thought to be a result of a combination of both physiological and psychosocial factors. Hormonal fluctuations are blamed as they may directly irritate the stomach (Stoppard, 2000). Increased levels of free thyroxine and beta-human chorionic gonadotrophin may also be partially causative (Stables & Rankin, 2010; Steer, 2005). Psychosocial stressors thought to play a role include depression and marital status (Munch, 2011). When combined with unplanned pregnancy, women who experienced nausea and vomiting during pregnancy are more likely to have poor maternal psychosocial adaptation (Chou, Avant, Kuo, & Fetzer, 2008). Alongside physiological and psychosocial factors, increased gravidy is also thought to play a role in increasing the risk of experiencing nausea and vomiting during pregnancy (Louik, Hernandez-Diaz, Werler, & Mitchell, 2006). Reassuringly for women who experience nausea and vomiting during pregnancy, Steer reports that "pregnancies associated with nausea and vomiting are less likely than average to result in miscarriage, preterm birth or intrauterine growth restriction" (2005, p. 1).

Current treatment and therapies are mainly focused around dietary advice, such as eating small regular meals to avoid hypoglycaemia (Stoppard, 2000). Consuming ginger-based products, salty foods and high carbohydrate foods such as wholemeal bread, potatoes, rice and cereal are also advised (Anderson & Johnson, 2005; Stoppard, 2000; Wattis, n.d.). Having crackers or toast before rising in the morning to stabilise blood glucose is a common recommendation, along with homeopathy and acupuncture (Wattis, n.d.). Increased intake of vitamin B6 and acupressure wrist bands for motion sickness are also believed to be of benefit (Livermore, 2000). Acupuncture to treat morning sickness is also becoming increasingly common (Norheim, 2001). The importance of social support cannot be overlooked in reducing the stress associated with nausea and vomiting (Chou et al., 2008).

Due to the course of the Vagus nerve and its autonomic supply to the digestive tract, osteopathic treatment for morning sickness may include treatment of the upper cervicals and occipitomastoid sutures (Green, 2000; Parsons & Marcer, 2006). Techniques for the thoracic and abdominal viscera and addressing torsion and compression of these organs may also reduce nausea and vomiting (Stone, 2007). Another structure to focus on is the liver, due to its detoxification action, restoring chemical balance in the body (Parsons & Marcer, 2006).
Symphysis pubis dysfunction

Symphysis pubis dysfunction (SPD), also known as pelvic girdle pain, is thought to affect one in 36 women (Owens, Pearson, & Mason, 2002) at some stage during or post pregnancy. The release of relaxin during pregnancy allows for increased mobility of the pelvic joints to aid in childbirth. Kristiansson, Svärdsudd and von Schoultz (1996) found that there was a relationship between serum relaxin levels and the degree of pelvic pain experienced during pregnancy, supporting this theory. SPD can occur due to this increased mobility in women who have congenital hypermobility, or those who have experienced a previous fall or injury to their pelvis resulting in malalignment of the pubic symphysis or sacroiliac joints (SIJ) (Owens et al., 2002). Because the structure of the pelvis is that of a bony ring, the pubic symphysis and SIJ directly affect one another. SPD can cause pain at the SIJ and SIJ dysfunction can cause SPD. Symptoms of SPD can occur from as early as the 12th week of pregnancy through to the postnatal period (Symphysis Pubis Dysfunction New Zealand, 2008). Owens (2002) found that 44% of women began experiencing symptoms in the second trimester with 45% in the third. Only 2% experienced the onset of symptoms during or post labour. SPD can range from pelvic discomfort to extreme debilitation, affecting the woman’s ability to walk, dress and subsequently care for her family. Symptoms include pain in the pubic symphysis, groin and lower abdomen, pain and difficulty abducting the legs, sciatica and pain in the lower back, especially the SIJ region (Symphysis Pubis Dysfunction New Zealand, 2008). Crichton and Wellock (2008) investigated the affects of SPD on pregnant and newly delivered women and their families using a qualitative phenomenological approach. They found that:

SPD had a profound effect on the women’s lives, leaving them feeling disabled and compromised in their personal, maternal, sexual and housekeeping roles. This affected their ability to function in what they considered to be the normal roles of family life and caused feelings of frustration, loss of control and helplessness. (2008, p. 9)

Some women experiencing SPD feared for their mental health due to the high levels of pain they experienced (Wellock & Crichton, 2007). It is thought that women who have experienced SPD in an earlier pregnancy will experience an increase in symptoms with multiparity. 68% of women questioned had experienced SPD in a previous pregnancy, with 70% of this group describing their current symptoms as worse than before (Owens et al., 2002). Literature on the treatment options for women living with SPD is scarce. Strengthening exercises for the muscles surrounding the pelvis, such as the gluteals, abdominals and latissimus dorsi, are often advised (Jeffcoat, 2010). Several options for the management of SPD, such as exercises, acupuncture, the
use of belts and patient education are underutilized due to a lack of comprehensive knowledge by healthcare professionals (Vermani, Mittal, & Weeks, 2010).

Osteopathy is an effective and recommended treatment option for treating SPD (Symphysis Pubis Dysfunction New Zealand, 2008). Various techniques can be employed to re-align the pubis symphysis and promote equal mobility of both SIJ’s. Work can also be done to strengthen the abdominals and pelvic floor to help support the pelvis, alongside relieve any sciatica symptoms (Symphysis Pubis Dysfunction New Zealand, 2008). Due to the natural elasticity of the pubic arch and its shock absorbing tendencies, it is paramount to limit the stress at this joint. Treatment to the periosteum and trabeculae of the pubic arch will promote the natural shock absorbing properties of the joint, allowing it to function correctly and subsequently decrease dysfunction (Stone, 2007). These techniques can be done both during and after pregnancy making osteopathy an option for all women who experience SPD, regardless of when their symptoms began, be it pregnancy or labour.

OTHER PREGNANCY COMPLAINTS

There are a myriad of other pregnancy complaints that affect the quality of life for many women. These include: cramps, constipation, feelings of faintness, dizziness, fatigue, haemorrhoids, stretch marks, breast tenderness, insomnia, thrush, varicose veins and oedema (Livermore, 2000; Olsson & Nilsson-Wikmar, 2004; Saladin, 2004; Stoppard, 2000; Wattis, n.d.). As these complaints may be either less severe or less prevalent amongst women during pregnancy, they will not been discussed in detail.

ROUTINE PRENATAL CARE

In New Zealand, women have many options for their prenatal care. Women are required to choose a lead maternity carer (LMC), which may be a midwife, a general practitioner or an obstetrician (New Zealand Ministry of Health, 2011). The women’s LMC will solely or partly care for them throughout their pregnancy and up to six weeks postnatally. The role of the LMC is to provide the majority of care throughout the prenatal, labour and postnatal periods and to refer the women to the appropriate healthcare provider when required care is outside their scope of practice (Pairman, Pincombe, Thorogood, & Tracy, 2006). In New Zealand, routine prenatal care developed around eighty years ago "based on the notion that pregnancy is a state of
pathology, rather than of normal physiology” (Pairman et al., 2006, p. 342). Furthermore, Pairman et al. state “the term ‘routine antenatal care’ is perhaps a misnomer, as there is no such thing as a ‘routine’ woman” (2006, p. 343). Part of this ‘routine’ care offered by the LMC includes screening for the prevention or detection of some infections, anaemia and hypertension in order to minimise maternal and neonatal morbidity and mortality (Pairman et al., 2006). Due to establishment of routine care being grounded in pathology, it highlights the need for an additional wellness care approach for pregnancy. As reducing the risk of pathology during pregnancy is of great importance and requires much care from the LMC, osteopathy is well suited to offering this wellness care approach. In New Zealand and Australia, antenatal visits during pregnancy traditionally occur four-weekly, beginning when the woman first contacts her LMC until 28 weeks gestation. From 28 to 36 weeks, fortnightly visits occur, followed by weekly appointments until birth. This traditional format has recently been debated due to the shift in focus to evidence-based practice, as this format has no medical, scientific or social foundation (Enkin, Keirse, & Neilson, 2000, as cited in Pairman et al., 2006). Additional to providing routine care, the women’s LMC may also put her in touch with antenatal classes should she want to attend. These may be run through hospitals or private groups. The focus of antenatal classes is to provide an opportunity to offer further information about pregnancy and childbirth and to put a woman and her partner in touch with other expectant parents (OHBaby, 2011).

OSTEOPATHY

The following section includes an introduction to the background and history of osteopathy, with focus on its application to obstetrics and gynecology. The safety and current use of osteopathy during pregnancy is then addressed, followed by an examination of the benefits of osteopathy during pregnancy.

THE ORIGINS OF OSTEOPATHY AND ITS APPLICATION TO OBSTETRICS

Osteopathy was founded by Dr. A. T. Still in 1874. Still was an American frontier doctor who felt that the current allopathic medical model was inadequate (Ward, 2003). He believed that “an up-to-date osteopath must have a masterful knowledge of anatomy and physiology. He [sic] must have brains in osteopathic surgery, osteopathic obstetrics and osteopathic practice” (Ward, 2003, p. 450). That Still included obstetrics as one of the three main parts to osteopathic
practice at that time shows the high importance which he placed upon the discipline and his belief that osteopathy could be of benefit during this stage of life. The following quote from his book *The Philosophy of Osteopathy* (Still, 1899) states the importance of optimal pelvic mechanics for childbirth:

> The first duty of the obstetrician is to carefully examine the bones of the pelvis and spine of the mother, to ascertain if they are normal in shape and position. If there is any doubt about the spine and pelvis being in good condition for the passage of the head, through the bones, and you find pelvic deformity enough to prohibit the passage of the head, notify the parties of the danger in the case at once. (p. 239)

This was written in a time where osteopathic physicians were also medical doctors and as such delivered infants. Since then the New Zealand healthcare system has dramatically changed, along with the scope of osteopathic practice. Nonetheless, some aspects, such as the importance of pelvic mechanics, are still applicable. The following section discusses the current use of osteopathy during pregnancy.

**SAFETY AND CURRENT USE OF OSTEOPATHY DURING PREGNANCY**

The applications of osteopathy during pregnancy are varied, with osteopaths having visceral, cranial and structural techniques, which they can combine in order to tailor treatment to each individual. Osteopathy is a safe treatment option for women, who are not only concerned for their own wellbeing, but also for that of their unborn child (Sullivan, 1997). A full obstetric history along with medical history is taken as part of the diagnostic process to ensure that any discomforts are musculoskeletal, as pain outside of this is referred to the midwife or GP as soon as possible (Hyde, 2009). Although Sandler states “there has not been one reported case in the literature of miscarriage caused by the use of manipulation during pregnancy” (1996, p. 181), many practitioners avoid treatment of the pelvis at 12 and at 16 weeks to annul any chance of precipitating miscarriage, as this is when the highest rate of spontaneous abortions occur (S. Sandler, personal communication, March 19, 2010; Stone, 2007).

Alongside treating women for pregnancy-related complaints, such as back pain, indigestion and carpal tunnel syndrome, osteopaths can also offer treatment to support the woman's body as it changes to accommodate a growing foetus. This may include working with postural and biomechanical aspects to support the woman throughout the remainder of her pregnancy and into childbirth. “You would not choose to run a marathon without adequate care and physical
preparation, why are women expected to have babies without the same sort of preparation and care?” (Sandler, 2009, p. 6). Sandler’s quote highlights the gap in current prenatal care. Women are caught between prenatal care that approaches pregnancy as a pathological state and that which approaches it as a normal physiological state. There appears to be no prenatal care that places emphasis on the fact that while pregnancy is a normal physiological process, changes occur relatively drastically, and therefore likely that women’s bodies need support throughout this process. Nonetheless, it is not routine for women to physically and mentally ‘prepare’ themselves for pregnancy and labour, despite childbirth being acknowledged as a laborious process, hence being referred to as labour (Howell, Mora, Chass, & Leventhal, 2010; Jones, Housman, & McAleese, 2010; Pairman et al., 2006).

Currently, literature available on osteopath’s attitudes to treating women during pregnancy and their beliefs regarding their role in prenatal care is limited. Sandler sees the role of the osteopath as “supporting the obstetric and midwifery services” (2009, p. 5). This view is also held by Stone (2007). In order to offer support to obstetricians and midwives, Sandler discusses the importance of supporting the woman and her partner throughout the antenatal period and alleviating common pregnancy complaints. Once these common pregnancy complaints are relieved, he then believes the osteopath’s role changes to support the physiological and postural changes so that the woman is prepared for labour. This view is also held by Parsons and Marcer (2006) who believe that osteopaths can help women to “prepare for the progression of their pregnancy and impending birth” (p. 289).

Sandler (2009) also discusses the osteopath’s role during labour and postnatally. The woman and her partner may invite their osteopath to attend the labour and treat the woman if required. However in the United Kingdom, only those trained specifically as midwives or medical doctors are entitled to manage a woman during labour. Therefore, even if osteopaths are invited to attend labour by the women to treat her during this phase, if those managing the labour do not want the osteopath involved, the osteopath has no legal right to be there (Sandler, 2009). The New Zealand law is less stringent on this aspect and the care a woman receives during her labour is her choice. The online Midwifery Council Scope of Practice document states that “When women require referral, midwives provide midwifery care in collaboration with other health professionals” (Midwifery Council of New Zealand, 2010, np.). It is assumed that ‘other health professionals’ can be extended to include osteopaths for the treatment of common pregnancy complaints and for osteopathic care during labour, should the woman request this. Furthermore, following the passing of the 1990 Nurses Amendment Act, New Zealand woman have “greater choice … about who cares for them during pregnancy and birth, and where they give birth” (Pairman et al., 2006, p. 195). Despite New Zealand women having greater freedom
of choice regarding the care they receive during birth, it is not known if, or how often, osteopaths in New Zealand attend births with the purpose of treating the labouring woman.

During labour, osteopaths may be of assistance in balancing the ligaments of the pelvis, releasing the diaphragm and upper abdominals to promote effective breathing, providing soft tissue massage to the fatigued erector spinae and gentle articulation to the lumbar and sacroiliac joints. These techniques are usually performed between contractions (Stone, 2007). Alongside the more mechanical techniques, osteopaths can also use cranial techniques to work with the primary respiratory mechanism⁴ to support the women if she is feeling fatigued (Sandler, 2009).

Additional to treating women prenatally, many osteopaths express the importance of postnatal osteopathic treatment for both the woman and her infant (Ward, 2003). Sandler states that this importance is highlighted by the fact that many women associate the onset of many musculoskeletal complaints with post-delivery, "It all started after I had my baby" (2009, p. 29). Alongside the mechanical strain the pelvis endures through childbirth, postnatal musculoskeletal symptoms may be in part due to the rapid changes in posture after delivery, unlike the comparatively slow changes that occur as pregnancy progresses (Parsons & Marcer, 2006).

Further to the above discussion on the current uses of osteopathy during pregnancy, labour and postpartum, additional benefits of osteopathic treatment during pregnancy are discussed below.

**Benefits of Osteopathic Treatment During Pregnancy**

Osteopathy during pregnancy has many benefits ranging from the decrease in severity or amelioration of common pregnancy complaints, to offering a wellness care approach for women throughout their pregnancy. This wellness care approach can decrease the severity and impact on daily life of many of these common pregnancy complaints and has the potential to be used as a preventative therapy to aid the body in its preparation for childbirth (Green, 2000; Hyde, 2009; Stone, 2007). When combined with osteopathic principles, a wellness care approach helps to facilitate the body to adapt to the new demands placed on it by pregnancy (Coulter, 2007; Ward, 2003) and is intended to aid in a more comfortable pregnancy and labour. Kuchera

⁴ The primary respiratory mechanism "is hypothesized to be a palpable physiological phenomenon that occurs in rhythmic cycles, called flexion-and-extension-phase, which are independent from cardiac and respiratory rates" (Sommerfeld, Kaider, & Klein, 2003, p. 1).
(1988) as cited in King (2000) expands on these osteopathic principles with relation to the obstetric patient stating that:

1. There are mechanical, physiological, and biological stresses inherent even in the patient who is destined to have a normal pregnancy. 2. The body has self-regulatory mechanisms which will provide optimal compensation for the stresses of pregnancy if they are free to work efficiently. 3. Distinctive osteopathic care is based upon the belief and clinical observations that structure and function are reciprocally interrelated. (p. 27)

Application of these osteopathic principles in order to aid the body in its preparation for childbirth may reduce the need for intervention during labour, which may have a direct link with the birth experience of the women. Women’s experiences of health care and childbirth are further discussed in the following section of this chapter.

It has been suggested that osteopathic treatment during pregnancy can decrease the duration of labour and the need for intervention such as forceps (King, 2000). Evidence supporting this idea dates back to the beginning of the twentieth century, although it cannot be identified how rigorous these studies were. A study by Whitting (1911) states large differences between the average labour duration for women who had osteopathic treatment prenatally and those who had not (as cited in King et al., 2003). Primiparous women who had prenatal osteopathic treatment were found to have 11 hours 12 minutes shorter labour than those who had not, whilst multiparous women who had prenatal osteopathic treatment were found to have 5 hours and 22 minutes shorter labour duration than multipara who had not. Furthermore it states that 6-18% of women who had not had prenatal osteopathic treatment needed an intervention such as forceps, compared to only 3 of the 125 women who received prenatal osteopathic care (King et al., 2003).

The following statement gives insight into the way in which osteopathic care during pregnancy is of benefit to the pregnant woman. King (2000) cites Kuchera (1988) as stating:

Manipulative treatment normalizes the somatic dysfunctions which produce mechanical stresses. It also improves the efficiency of the mechanical and physiological components of the patient’s compensatory and homeostatic processes. The energy that is subsequently saved through the patient’s improved body efficiency and removal of

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5 Primiparous: a woman who is pregnant for the first time (Deverson & Kennedy, 2005).

6 Multiparous: having born more than one child (Deverson & Kennedy, 2005).
somatic dysfunctions will be available for the growth of her foetus and to improve her physical and mental life. (p. 3)

The benefits of manual therapy during pregnancy are also reported in the literature of other manual therapies. A chiropractic study involving primiparous women found that those who had had manual therapy prenatally had a 25% shorter labour duration on average, whilst multiparous women who had sought prenatal manual therapy had averaged 31% shorter labour (Borggren, 2007). Whilst further studies are needed to support these claims, these figures suggest that declarations that manual therapy can decrease labour duration may not be purely anecdotal.

Additional to decreased labour duration and need for intervention, osteopathic care during pregnancy has also been reported to improve women’s quality of life. Many common pregnancy complaints such as nausea and vomiting (Munch, 2011) and back pain (Olsson & Nilsson-Wikmar, 2004) have been identified as having a large impact on women’s quality of life during pregnancy. By decreasing the severity of these complaints, it is thought that osteopathic care could therefore indirectly have a positive effect on women’s quality of life during pregnancy. Alongside influences on quality of life, osteopathic care during pregnancy may also have a positive effect on women’s attitude and feelings towards the remainder of their pregnancy and childbirth. Many women report feelings of fear and anxiety around pregnancy and childbirth (Haines, Pallant, Karlström, & Hildingsson, 2011). This is understandably more common in women who have had a previous negative childbirth experience. During prenatal appointments, reassurance was fostered when their healthcare provider used an empathetic conversation style (Raine, Cartwright, Richens, Mahamed, & Smith, 2010). Osteopathic care may provide another opportunity for women to be reassured from another healthcare provider about their abilities to go through with the remainder of pregnancy and childbirth.

Now that the benefits of osteopathic treatment have been examined we move on to evaluate the literature around the attitudes and experiences of women to healthcare during pregnancy.

ATTITUDES AND EXPERIENCES

This section examines the literature on women's attitudes and experiences of prenatal healthcare, both routine and additional. Patient’s attitudes and experiences have a significant place in research due to the important information they provide health practitioners with,
allowing them to provide patients with the best care possible. The reliability of retrospective reflection on major life experiences is then examined.

**WOMEN’S EXPERIENCES OF HEALTHCARE PRENATALLY**

In a search of EBSCO, AMED, Science Direct, Medline, Health Source, PEDro, ProQuest and SCOPUS databases, no literature was found regarding the exploration of women's experiences of osteopathic treatment or any other manual or complementary therapies whilst pregnant. However the attitudes and experiences of women to various areas of healthcare have previously been explored. A study by Smythe (1998) used an hermeneutic approach to understand what it meant for both practitioners and women to be safe in childbirth, while Viedma-Dodd (2006) used phenomenology to identify factors mothers associated with infant fussiness, unsettledness or irritability. Both methods were successful in identifying common themes between participants who had experienced the phenomenon.

Literature regarding women's experiences of prenatal health care was found, although much of the discussion focused on external factors that influence the women's access to prenatal care (Phillippi, 2009). Whilst the factors identified apply to osteopathic care also, they are not of direct relevance due to osteopathy not being a routine prenatal treatment. Factors that were found to affect the woman's experience of prenatal care included aspects such as wait time, environmental factors (including privacy), individualised care and the duration of the appointment (Novick, 2009). Due to the longer duration of osteopathic appointments compared with routine medical check-ups and the increased opportunity osteopathic appointments offer to discuss health care concerns informally, osteopathic care, additional to routine prenatal care, may allow greater access to information and support for women throughout their pregnancy. It is hoped that the data collected throughout this study may offer further information regarding this.

Kuo, Wu and Mu (2010) investigated Taiwanese women's experiences of hospital midwifery care. Alongside the importance of professional competence and feelings of respect from the midwives, it was found that the women placed high importance on trust in their relationship with their midwife. The importance of trust within a healthcare setting has long been recognised (Hall, Dugan, Zheng, & Mishra, 2001). Wright, Holcombe and Salmon (2004) found that trust was the most important aspect in patient-physician communication for women who had breast cancer. The above literature highlights the importance of trust between patient and clinician in women's healthcare.
In a study on women’s experiences of communication in prenatal care, Raine, et al. (2010) identified factors contributing to constructive communication which included an empathetic conversation style, being open to questions, allowing time to talk, and taking the initiative. Factors that contributed to experiences of poor prenatal communication included a lack of description or clear understanding of antenatal care, a lack of explanation about the roles of different health care providers, a lack of communication around any concerns the healthcare provider may have, and a lack of care and attention (Raine et al., 2010). This study was conducted in a London hospital, resulting in the women’s experiences of prenatal healthcare including their interactions with various prenatal healthcare providers such as General Practitioners, midwives, obstetricians and sonographers. Teate, Leap, Rising and Homer (2011) studied women’s experience of group pre-natal care. They highlight that women in this study appreciated the opportunity this group form of prenatal care gave them to build supportive relationships. Although these relationships occurred with other pregnant woman, it highlights the importance of support during pregnancy.

Women’s childbirth experiences are influenced by various factors such as length and difficulty of labour, pain control, expectations of pain level and their perception on their level of involvement in decisions. A descriptive, cross sectional designed study into Jordanian mothers’ childbirth experiences indicated that women were fearful about the childbirth experience, that labour was more painful than expected and that they perceived their childbirth experience as intense. Additionally, most women were not satisfied with their childbirth experience and felt they had little control during childbirth (Oweis, 2009). O’Hare and Fallon (2011) studied women’s experiences of control in labour and childbirth and found that it is a highly important aspect, regardless that participants had both positive and negative experiences regarding their perceived levels of control during childbirth. Alongside this, previous childbirth experience also plays a role in subsequent birth experience expectations. Nilsson, Bondas, and Lundgren (2010) conducted a study on women with intense fear about childbirth. Participants were pregnant with their second child and considered their previous birth experience negative. They highlighted that women had feelings of fear and loneliness, had reduced trust in maternity services and had little faith in their abilities in childbirth.

Women’s experiences of prenatal healthcare are influenced by various factors including; trust, individualised care, open communication between the women and her healthcare providers, support and personal expectations. In order promote positive experiences of prenatal healthcare, the above mentioned factors need to be considered.
The following section moves on from women’s experiences of healthcare prenatally and during labour, to their attitudes of prenatal healthcare.

**WOMEN’S ATTITUDES TO PRENATAL HEALTHCARE**

“Pregnancy and childbirth are both biological and cultural acts” (Rogers-Clark & Smith, 1998, p. 72) and are therefore influenced by both of these factors. Women have varying views and opinions regarding medical intervention during pregnancy and childbirth and it is assumed that they are influenced by society, culture and previous experiences (Rogers-Clark & Smith, 1998).

The attitudes of women to various aspect of women’s healthcare such as breast examinations (Spiegel, Hill, & Warner, 2009), menopause (Ayranci, Orsal, Orsal, Arslan, & Emeksiz, 2010) and contraception use (Bryant, 2009) have been examined. Alongside this, women’s attitudes towards pregnancy and complementary and alternative medicine have also been studied.

Sable and Wilkinson (1998) studied attitudes to pregnancy in a population of Missouri women. They found a relationship between women’s attitudes to their pregnancy and whether or not the pregnancy was intended. Additionally, a relationship between pregnancy intention and prenatal care adequacy was identified, with women who had unintended pregnancies being more likely to experience inadequate prenatal care.

Women’s attitudes to complementary and alternative medicine have also been investigated. Biddle, Simpson and Wilkinson (2003) found that 92% of respondents are open to new alternatives in health and that 65% of respondents held the attitude that complementary and alternative medicine use is undiscovered. Lapi et al. (2010) investigated the prevalence of complementary and alternative drug use amongst pregnant women and found that 48% of women reported taking at least one complementary and alternative drug during pregnancy, and that women’s use of complementary and alternative medicine prior to pregnancy was an effective predictor of their use during pregnancy.

Pregnancy complaints such as back pain, carpal tunnel syndrome and nausea and vomiting affect a high number of women throughout their pregnancies and in many cases, impact on the women’s quality of life. As such there is a need for a wellness approach to pregnancy to support current routine prenatal healthcare. Osteopathy is well suited to support current routine prenatal healthcare and can learn much from previous studied into the attitudes and experiences of women to prenatal healthcare.
Osteopathic treatment is a safe treatment option for women during pregnancy that has many benefits such as the relief of common pregnancy complaints as well as preparing the body for childbirth. These benefits, combined with evidence suggesting that it can decrease labour duration and need for intervention makes it a sound therapeutic option for pregnant women. This study may provide valuable additional insight into the attitudes of women who have experienced osteopathic treatment during pregnancy. It is hoped conclusions drawn from this data will benefit health practitioners who treat women throughout their pregnancy, positively influencing women’s pregnancy and childbirth experiences.
CHAPTER THREE: RESEARCH METHOD
This chapter investigates the theoretical aspects of the chosen research method. It begins with an examination of qualitative research methods and then moves on to discuss phenomenology as a research method and philosophy. Examination of hermeneutic influences is also undertaken. This is followed by a review of the data analysis method employed in this study and an examination of rigour in qualitative research. The application of the theoretical aspects to this study is further discussed in the following chapter – Undertaking the Project.

QUALITATIVE METHODS

This study into the attitudes to and experiences of osteopathic care during pregnancy used a general qualitative approach. As little research into osteopathy during pregnancy had been done prior, an exploratory study was required (van Manen, 1990). Qualitative research is suitable in these situations as it allows the researcher to explore the topic in sufficient detail, without the constraints of prior assumptions. In areas where little investigation has been completed, these assumptions may impact on the hypotheses generated and therefore the data obtained by the study (Morse & Field, 1995).

There are many different methods which are part of the genre of qualitative research such as grounded theory, ethnography and phenomenology. Grounded theory seeks to describe and explain a phenomenon (Bassett, 2006), whereas ethnography looks for patterns and changes within the phenomenon and is often the method of choice in studies of culture (Silverman, 2006). Whilst this study used a general qualitative approach, phenomenology was identified as the core method with which this study was undertaken and is discussed in further detail below. Following this, the hermeneutic application of phenomenology as it applied to this study is covered.

PHENOMENOLOGY

"Phenomenology is both a philosophy and a method” (Ray, 1994, as cited in Bassett, 2006, p. 155) and is the study of the lived experience. A phenomenological research design is suitable in situations where it is important to understand the common experiences of several individuals and when a deeper understanding of the phenomenon is required (Creswell, 2007). The holistic approach of this research method is consistent with the holistic principles of osteopathy. This makes it well suited to investigate women’s attitudes to and the experience of osteopathic care.
In order to understand the lived experience of women who had osteopathic treatment during pregnancy, influences from phenomenological methodology were applied (Creswell, 1994).

**Hermeneutics**

Hermeneutics refers to “the art and science of interpretation” (Ezzy, 2002, p. 24). Hermeneutics provides a background for the application of qualitative research and therefore allows the researcher to consider the effects the application of these findings may have on the life of others who experience the phenomenon (Ezzy, 2002). A total understanding of the lived experience cannot be achieved due to the complexities of life and the numerous influencing factors that affect the lived experience. Furthermore, the interpretation of the phenomenon may differ, with neither interpretation being more or less correct than the other (van Manen, 1990). Hermeneutics however attempts to gain as much knowledge about the phenomenon experienced as possible whilst acknowledging that the interpretation of this will continue to be refined. “The hermeneutic approach does not therefore just acquire new knowledge, rather that which is already understood comes to be interpreted” (Bassett, 2006, p. 158).

Hermeneutic examination and reflection added extra depth to the study by identifying possible new meanings that findings may have on health care for women during this stage of their lives (L. Smythe, 2000). Pratt and Byrne (2008) used a hermeneutic and phenomenological approach to understand the experiences of living with Dupuytren’s disease of the hand and acknowledged that cannot occur in isolation of the person’s world. Applying a similar approach allows the exploration of the attitudes to and experiences of women to osteopathic treatment during pregnancy, allowing a successful exploring and answering of questions with sufficient depth.

**Method**

The aim of the method and philosophy of phenomenology is to uncover hidden meanings (Bassett, 2006). This requires a sound description of the phenomenon as experienced by the participants (van Manen, 1990). These requirements influenced the sampling process undertaken in order to recruit participants suitable for participation in this study. Purposeful and snowball sampling was carried out in order to select women with information-rich cases. Information rich cases are those from which much can be learnt about issues of fundamental
importance to the purpose of the research (Westfall, 2003). This purposefulness allows central issues of the phenomenon to be uncovered. Snowball sampling helped to further recruit participants through those who know information rich cases (Creswell, 1994). This included both osteopaths and other participants who knew of women who have experienced the phenomenon.

As applied to this study, a two-way interchange between participant and researcher was needed, resulting in the interview process being the appropriate means of collecting information. The interview process was carried out individually, enabling an investigation of the attitudes and experiences each woman had regarding osteopathic care during her pregnancy. Rich, deep data were generated during this process which provided large amounts of material. Analysis of this data was undertaken via thematic analysis which supported the phenomenological approach. This is discussed below.

**DATA ANALYSIS**

Qualitative data can be analysed with various methods including content analysis and thematic analysis. Content analysis requires the identification of categories, prior to searching for them in the data (Ezzy, 2002). As this was an exploratory study, no categories had been previously identified, resulting in thematic analysis being most appropriate. Furthermore, thematic analysis was chosen as it “gives control and order to our research and writing” (van Manen, 1990, p. 79). As research of the human sciences is concerned with meaning, thematic analysis is appropriate as it allows us to interpret the meaning of a lived experience (van Manen, 1990). When applied to this study, part of the thematic analysis process required exploration of the meaning of the phenomenon identified in order to fulfil the research aims. This was achieved through the application of hermeneutics. As stated by Creswell (1994) phenomenological and hermeneutic methods require thematic analysis to look for themes that capture the nature of the experience. This further supported a thematic analysis method as being most appropriate for the type of data collected in this study.

Many pivotal researchers have developed their own methods for thematically analysing data. I chose to follow van Manen's method in this study as the process allowed for greater flexibility in analysing the data but ensured I had strong foundational theories with which to base these processes on.
There are three main processes that van Manen discusses which allow the researcher to uncover or isolate thematic aspects within the studied phenomenon. These include a, “wholistic or sententious approach”, “the selective or highlighting approach” and "the detailed or line-by-line approach" (1990, pp. 92-93). The wholistic or sententious approach evaluates the text as a whole and looks for a sentence or phrase which captures the fundamental meaning of what was said. In the selective or highlighting approach a section of text is read many times while the researcher seeks to identify the statements or phrases essential in understanding the phenomenon described. The detailed or line-by-line approach looks at each sentence individually to determine the importance it has in revealing information about the phenomenon (van Manen, 1990). By working with the data from a global aspect and then refining this to work section by section, the data can be analysed at different levels. As with the philosophies of the method chosen, this method of data analysis also fits well with osteopathic principles. When evaluating the patient, many osteopaths begin with a global approach, evaluating the patient as a whole and then move to the part that is dysfunctional (Ward, 2003). The process of thematic analysis as I employed it is discussed in further detail in following chapter, Undertaking the Study.

**Rigour in Qualitative Methods**

Rigour in qualitative methods ensures that certain methods have been employed throughout the study so that the findings extrapolated from the interpretation of the data are sound. There are many operational techniques that can be employed to instill trustworthiness within a qualitative study. Some of these include purposeful sampling, sending transcripts to the participants, testing the themes and maintaining an audit trail (Bassett, 2006; Ezzy, 2002).

As mentioned above, purposeful sampling ensures that participants involved in the study have an abundance of information to share regarding their attitudes to and experience of the phenomenon studied. Alongside ensuring that potential participants had a rich account of the phenomenon investigated, it also guarantees that they fit all inclusion and exclusion criteria. On the contrary, diversity within the sample is also important in order for the researcher to be exposed to varied accounts of the phenomenon. Therefore, purposeful sampling leaves the researcher expecting that their findings are applicable to the greater population of those who have also experienced the phenomenon (Bassett, 2006; Creswell, 2007).

Sending back transcripts to the participants concerned ensure that participants are satisfied with the data obtained from their narrative as it provides them with an opportunity to add or
omit any information obtained. Returning to the participants is another method used to promote rigour in qualitative research. By returning the findings to the original participants or to those who have also experienced the phenomena they are able to endorse the findings or comment on any discrepancy (Taylor, Kermode, & Roberts, 2006). The application of returning to the participants in this study is discussed in the following chapter.

Testing of the themes is a process that occurs toward the end of the analysis process. It offers the researcher an opportunity where they can extract themselves from the data and reflect upon their findings as a whole. This ensures that the ideas generated are representative of the majority of participants. This process can also be carried out when someone who is unfamiliar with the data groups things according to their understanding of the phenomena. This strengthens what is found as it allows for further refining of the data and a fresh perspective (Giddings, Roy, & Predeger, 2007). Expert review contributed to review and understanding of the phenomenon, the application of which is also discussed in the following chapter.

By leaving an audit trail one can see how the researcher came to the conclusions that they did. It validates that themes are clearly linked to the dialogue and expresses research adequacy by providing evidence for major decisions (Creswell, 1994).

Now that an account of the theory behind the method used in this study has been given, the following chapter covers the way in which the theoretical aspects were applied to this project.
CHAPTER FOUR:
UNDERTAKING THE STUDY
This chapter examines the application of the research theory discussed in the previous chapter. It considers the entire research process, beginning with gaining ethics approval and then moves on to discuss participant recruitment, the interview process and development of the themes, finishing with a discussion on how trustworthiness of this study was maintained.

**Ethical Considerations**

Ethical approval was gained from the Unitec Research Ethics Committee on the 25\textsuperscript{th} of August 2010 for the period between the 25\textsuperscript{th} of August 2010 and the 24\textsuperscript{th} of August 2011 (Appendix A, p. 96).

Participation in the research was informed and voluntary. This was outlined in the information sheet (Appendix B, p. 97) along with the aims of the study. All participants were given the opportunity for further questions if they had any doubts or needed clarification of any issues. Participants were anonymised in all transcripts by a pseudonym that they chose from a list provided. Whilst this ensures anonymity it also allows the participants to “retain a sense of ownership over their words” (Westfall, 2003, p. 21). Informed consent was acknowledged by signing a consent form (Appendix C, p. 98). Forms were separated from the data and all information was stored in a secure location if printed, or password controlled files where electronic.

Whilst this study was considered unlikely to induce anxiety for the participants involved it was a concern that during the interview process participants may recall an unpleasant or traumatic experience. I was aware of this possibility and being experienced in patient care, I would cease the interview if it were recognised that the participant was encountering emotional discomfort. These measures were not required in the undertaking of this project. Osteopaths who treated participants during their pregnancy were not identified in the study.

**Participants**

To be eligible to participate in this study, participants were required to have given birth within the previous year, but at least six weeks prior to the interview. This ensured that recall of their osteopathic treatment was still deep, whilst allowing time for them to settle with their infant first. Recall of major life experiences such as childbirth has been found to be accurate, and that
women are able to recall events with clarity (Waldenstrom, 2003). Participants were required to have had osteopathic treatment at least three times during their pregnancy as it enabled adequate exposure to osteopathic treatment. Furthermore, many osteopaths like to treat women during each trimester of their pregnancy to ensure patient health is optimum during each stage (Green, 2000). As an interview was the means of data collection, participants were required to communicate their experiences verbally and therefore needed to be fluent in English. It is recommended that phenomenological researchers interview around five individuals who have experienced the phenomenon to obtain adequate data (Creswell, 2007). A sample of seven women was chosen in order meet data sufficiency whilst allowing for the attainment of rich, deep data as required for qualitative studies.

**Sampling**

Both purposeful and snowball sampling occurred in order to recruit enough participants who had experienced the phenomenon. Purposeful sampling ensured that participants had adequate experience of the phenomenon and that their cases were rich with information. Furthermore, it ensured that they fulfill all inclusion and exclusion criteria. Snowball sampling helped to identify participants of interest. This was achieved through communication with those who know information-rich cases (Creswell, 2007). In this situation it was through osteopaths who had treated these women. Advertising via posters took place at osteopathy clinics in the Auckland area that were known to commonly treat women during and after pregnancy as well as their infants. As this is a retrospective study, it was thought the treatment of infants and women post partum would allow access to women who had had osteopathic treatment during their pregnancy. Advertising through mothers support groups such as antenatal classes and yoga for pregnant women was also used. It was planned that if recruitment of participants proved difficult, an approach would be made to the osteopaths and administration staff at the clinics identified, to ask if they could contact patients who had recently been treated prenatally and enquire if they would be interested in participating. Due to the lack of response from advertising posters, this was the way in which all women were recruited. The importance of informing potential participants about the purpose of the research and their freedom to decline participation if wished was discussed with clinic staff who contacted potential participants. Women who gave permission for their osteopath to pass on their contact details were then contacted and the purpose of the research was explained. Once it was ascertained that they fulfilled all inclusion and exclusion criteria, they were emailed or posted a copy of the information sheet. Approximately one week later I contacted the women again and offered them
an opportunity to discuss any questions they had regarding the study. Once all questions had
been answered and the women indicated they were happy to participate, a date and time was
organized for an interview to be conducted in a place of their choice. As caring for a young
family is time consuming and energy demanding, by holding the interviews in a place which
suits them best, participants are more comfortable, allowing them to tell their stories in rich
detail (van Manen, 1990). For all participants, the place of choice for the interview to be held
was their home. Although the first recruitment plans were not successful, it was gratifying that
all women contacted through the osteopaths were interested in participating.

THE WOMEN – SAMPLE CHARACTERISTICS

The seven women ranged in age from 30 to 48 years and were a mix of first time mothers (n=3)
and those who had one or more births before. Including first time mothers, four of the women
had not experienced osteopathy with any other pregnancies. One woman had experienced
osteopathy during the last two of her three pregnancies, one during the final three of her five
pregnancies. The seventh woman had experienced osteopathy during all (n=3) pregnancies.
Sample characteristics for individual participants are presented in Table 1 below. Partners of
three of the participants were present throughout the interview process and two of them
contributed to the discussion. Consent from the participant’s partners was gained in both cases.
Their dialogue was included in the transcription and data analysis process as they participated
in the interview willingly and on their own accord. The men’s comments further supported
those of their partner and were found to add further depth and enrichment to the data. The
amount of exposure to osteopathy during pregnancy ranged from approximately five to twelve
appointments, although no participant could identify exactly how many sessions she had had.
Interestingly, of the seven participants, three experienced solely cranial osteopathy, three
experienced solely structural osteopathy and one participant’s osteopath used both modalities.
This even exposure to different osteopathic modalities provided a pleasant surprise, as it was
not intentional to recruit participants with such an even spread of exposure to differing
osteopathic treatment styles. Whilst each woman’s experience is her own and no two women
will have the same experience of osteopathy even if matched for gestation, complaint and
practitioner, this demographic spread leaves me expecting that common themes experienced by
these women are likely to be relevant to other women using osteopathy during their
pregnancies.
TABLE 1

SAMPLE CHARACTERISTICS

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Age</th>
<th>Number and ages of children at time of interview</th>
<th>Osteopathy during other pregnancies?</th>
<th>Number of osteopathic treatments (approximately)</th>
<th>Style of osteopathy experience (Cranial or Structural)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ella</td>
<td>30</td>
<td>2 (3 years, and 12 weeks)</td>
<td>No</td>
<td>8</td>
<td>Cranial</td>
</tr>
<tr>
<td>Jane</td>
<td>39</td>
<td>1 (9 months)</td>
<td>N/A</td>
<td>5</td>
<td>Structural</td>
</tr>
<tr>
<td>Emily</td>
<td>37</td>
<td>5 (8, 6, 4, 2 years, and 9 weeks)</td>
<td>Yes, last three</td>
<td>5</td>
<td>Structural</td>
</tr>
<tr>
<td>Amy</td>
<td>32</td>
<td>3 (3 years, 22 months, and 7 weeks)</td>
<td>Yes, 2nd and 3rd</td>
<td>6</td>
<td>Cranial</td>
</tr>
<tr>
<td>Lucy</td>
<td>48</td>
<td>1 (12 weeks)</td>
<td>N/A</td>
<td>12</td>
<td>Cranial</td>
</tr>
<tr>
<td>Nicola</td>
<td>42</td>
<td>3 (7, 5 years, and 12 months)</td>
<td>Yes –all three</td>
<td>8</td>
<td>Both</td>
</tr>
<tr>
<td>Lauren</td>
<td>33</td>
<td>1 (10 weeks)</td>
<td>N/A</td>
<td>7</td>
<td>Structural</td>
</tr>
</tbody>
</table>

THE INTERVIEW PROCESS

A practice semi-structured interview was carried out with a peer who role-played having experienced osteopathic treatment through a pregnancy. This allowed me to establish that the interview structure was sufficient and that all aspects had been covered.

Participants were given an opportunity to have any further questions answered, prior to the conduction of the interview. Once it was established that the participant was willing to continue, I obtained written consent before commencing the interview.
Semi-structured interviews were chosen due to the nature of the information sought and to keep the participant 'on track' but still allowing them to “tell their stories and relate their experiences in the deepest and richest way possible” (Taylor et al., 2006, p. 414). Interviews were conducted with the aid of an interview guide in order to support the semi-structured process (Appendix D, p. 99). The interviews varied in length from 30 to 70 minutes and all began with the collection of demographic information. The focus throughout the interview was to identify the women's attitudes to and experience of osteopathic care during pregnancy and any relationships this may have with their quality of life and childbirth experience. The participants all openly discussed their pregnancy and any additional prenatal care which allowed for a greater understanding of their pregnancy and childbirth experience as a whole. Written field notes were also collected during the interview and audio field notes were recorded immediately after which helped support the data analysis process.

DEVELOPING THE THEMES – DATA ANALYSIS

Interviews were audio-recorded and then transcribed, some by the researcher and others by a transcribing typist who signed a non-disclosure form (Appendix E, p. 100). Once transcribed the transcripts were checked for accuracy by re-listening to the recording whilst reading the transcript. Participants received a copy of their interview transcript via the same method they had chosen to receive the information sheet (either email or post). All but one participant opted to have their information sheet and transcription emailed instead of posted. This was received with a note attached, informing the participants that they were welcome to make changes to the transcript or request the omission of any of the information collected. If they felt this was required they had two weeks to respond to this. All participants were satisfied with the information collected and no transcripts required any further editing.

Interview transcripts were analysed thematically in order to establish explicit and implicit themes within the women's experiences. This was accomplished manually and involved interpretation and exploration of the women's experiences and attitudes towards osteopathic treatment during their pregnancy and any relationship it may have had with their birth experience. Through listening to the audio taped interviews and re-reading the transcripts many times, familiarity with the transcripts was achieved. For the four interviews I transcribed, the analysis process was initiated during transcription. Notes were made and put aside with the field notes for further reflection during the data analysis process. These notes supported my ideas throughout the analysis process but did not initiate any further lines of enquiry. The data
were compared and contrasted, alongside seeking patterns and repetitions amongst the participants. Analysis occurred as texts were condensed and interpreted. Openness to different possibilities and alternative explanations was important throughout this process in order to ensure that I had not come to conclusions too quickly or made assumptions (Creswell, 1994).

I utilised van Manen's (1990) method of data analysis as explained in the previous chapter. Whilst the method he outlines provided me with a solid foundation with which to conduct my data analysis upon, I found that further steps needed to be employed in order for me to analyse the data adequately. The following outlines where this occurred in my data analysis process:

1. As stated by van Manen, the “wholistic or sententious approach” required me to initially identify the main ideas present within the text (1990, p. 92). I achieved this by reading through the text many times with and without the presence of the audio recorded interview. The main three to five ideas were identified within this process and areas of text which expressed this most strongly were identified for the following step.

2. “The selective or highlighting approach” required me to analyse these areas of text with greater depth (van Manen, 1990, p. 93). Here I looked to extrapolate sentences or phrases that were essential in understanding the phenomenon.

3. Next I employed “the detailed or line-by-line approach” which looked at sentences individually (van Manen, 1990, p. 93). I found this to be an important step as often a certain phrase explained the phenomenon or its application to women’s healthcare in a well-rounded manner, but the sentence highlighted a certain aspect of the phenomena studied. I found this helpful in enriching the analysis process as it led me down various lines of enquiry, exhausting many possibilities the meaning of the data may have.

4. I employed additional steps to further support the analysis process. This consisted of formulating a document on each participant consisting of demographic information and extrapolated data. This was supported by notes to explain my current interpretation of the data. Once complete for each participant I then constructed a document with all main ideas and quotes supporting these ideas. Quotations were colour coded in order to demonstrate to whom each idea was significant. This process was furthered by two other women who had backgrounds in education and women’s health. With their support the quotations were re-organised into categories, providing an opportunity for me to discuss the meaning of these quotes further and the application these findings may have on women’s health. I found this to be extremely beneficial as it forced me to explain the phenomenon as I saw it under scrutiny. At the end of this procedure potential themes were proposed that were representative of the attitudes and experiences of the participants (Creswell, 1994; Taylor et al., 2006).
MAINTAINING RIGOUR

Rigour was established by employing several methods to maintain the study's trustworthiness such as purposeful sampling, sending the transcripts to participants, testing of the themes and maintaining an audit trail.

Purposeful sampling ensured the participants partaking in the study had information-rich cases and fitted all inclusion and exclusion criteria. By recruiting those with information-rich cases it ensured that their attitudes to and experiences of the phenomenon studied were deep and that there is much to be learnt from their accounts about the phenomena (Westfall, 2003). Furthermore, it allowed the researcher to ensure that there was diversity within the participants. Whilst purposeful sampling supported this diversity by ensuring that all participants had not had treatment by the same osteopath, it also allowed flexibility within the sample population. This was inadvertently shown when it was realised the sample contained an even spread of women who had experienced different styles of osteopathy. As mentioned above in the sample characteristics section, some participants had been exposed to solely cranial osteopathy (n=3), some to solely structural osteopathy (n=3) and one participant had experienced both modalities.

It was anticipated that by sending a copy of the transcript back to the participant concerned for amendments if required, that the material obtained was representative of their experiences and attitudes. Furthermore, it allowed participants an opportunity to request the omission of any of the data gained or expand on what had previously been recorded. All participants were satisfied with their data and no changes were requested.

Testing of the themes was carried out on many occasions throughout the process of thematic analysis. One of the ways by which this was achieved was by expert review. This was accomplished by reporting emerging findings at the educational institute's research seminar and by engaging in dialogue with other peers and research supervisors, which increased my understanding of the phenomenon (Giddings et al., 2007). This gave the researcher an opportunity to ‘step back’ from the analysis process and reflect on the participants both individually and as a group, ensuring that the themes identified were representative of the majority of participants in some form. As the main themes generated many subthemes, it was often found that these ideas represented certain participants more strongly than others. However, the overarching theme consistently represented the majority of participants.
The data collection and analysis process left an audit trail representative of research adequacy, providing evidence of key decisions throughout the data interpretation process. The audit trail validates that themes are clearly linked and identified in participant dialogue. This can be seen in the following chapter where the themes are examined. Where a certain aspect of the phenomenon is described, it is supported by participant quotations, allowing the reader to see how conclusions were reached.

I undertook the project with an open-mind, but was aware of the effect that prior knowledge, and my own attitudes and experiences may have on the interpretation of the text. Due to my lack of personal experience of the phenomenon, it was thought that these prior attitudes had stemmed from social and educational interaction and experience. I actively sought to identify these aspects and continued to reflect upon the influence they may have as the data analysis process was carried out in order to separate these influences from the text.

This chapter examined the application of research theory introduced in the previous chapter and how this was applied to this study. Further introduction to the participants will feature next, prior to the results section, presented in Chapter five.
PARTICIPANT INTRODUCTION

The following section provides a background on each participant and their situation in order for the reader to understand the circumstances pivotal in influencing their attitudes to and experiences of the phenomenon. Quotations from participants in this sections aim to further portray the women’s views.

Ella

Ella is a thirty year-old mother of two children who had recently moved to New Zealand to be near her partner’s family. She was the only participant who had not experienced osteopathic care prior to the treatments she received during her pregnancy with her second child. Ella undertook osteopathic treatment as an adjunct to other prenatal care, both routine and supplementary and sought recommendations of suitable osteopaths from her midwife. Pregnancy complaints that Ella reported included lower back pain, fatigue, vaginal heaviness and morning sickness. She had approximately eight osteopathic treatments, from sixteen weeks gestation onwards. Important in Ella’s situation was that she had tried two osteopaths before settling with one who she felt was supportive and comfortable with her birth and pregnancy choices, gave an effective cranial osteopathy treatment and was interested in women and pregnancy:

“I just think it’s being interested and open to the types of things that we wanted to do, and you know, it must be hard as a practitioner, you can’t be that to everyone, but I guess that’s why we shopped around a little bit until we could find someone.” (Ella, p. 14, lines 6-9)

Jane

Jane is a thirty nine year old mother of one who had also recently settled in New Zealand. Jane had extensive experience of varying forms of manual therapy as a patient and client during her travels of the world. Jane sought osteopathic treatment from her osteopath prior to pregnancy and returned for additional treatment for pregnancy complaints including lower back pain. Once resolved, treatment focused on other complaints associated with pregnancy such as oedema of the extremities alongside general ‘aches and pains’. Throughout the last trimester of
pregnancy she received approximately five structural treatments from her osteopath. Gagging and morning sickness were also experienced early in her pregnancy. Jane’s birth experience was influenced by a genetic condition affecting her muscles that resulted in her ‘fighting’ the hospital for an elective caesarean:

“It was a battle the whole way through. It was a horrible experience, but yeah, we got what we wanted in the end because they weren’t willing to let me, they pretty much said ‘no, you can’t have it’ [caesarean].’ And I said, ‘yeah I can actually’. It was really traumatic actually. It was very stressful. I really enjoyed my pregnancy, I loved it, it was fantastic. The only bit that I didn’t like was having to go into that hospital on a fortnightly basis and deal with a bunch of people that really had their own agenda and didn’t include me in it. That was quite frustrating. And then we found out later that they were wanting to get some information about vaginal birth with women with my condition, because there’s not many around.” (Jane, p. 4, lines 11-20)

Emily

Emily is a thirty-seven year old mother to five who worked as a nurse prior to starting her family. Emily came across osteopathy unintentionally and had experienced osteopathy with two previous pregnancies, which added richness and variety to her story. Structural osteopathy was experienced during her fifth pregnancy on approximately five occasions from seventeen weeks gestation onward. Pregnancy complaints experienced by Emily during her fifth pregnancy included sciatica, morning sickness, lower back pain, a torn back muscle and reflux. Aspects of osteopathy during pregnancy that Emily appreciated included “drug free pain relief” (p. 7, line 25) and that it enabled her to “function properly” (p. 3, line 31) both of which she felt were factors that impacted largely on her family:

“In fact when I was really sick with this morning sickness my six year old said to his Dad, “Mum’s so lazy” and I thought oh, they’ve just got no idea. I thought gosh, so that’s how they view me, just lying in bed because I can’t be bothered getting up and I just want to have days and days and days on end in bed.” (Emily, p. 4, lines 2-5)
Amy

Amy is a thirty-two year old mother to three preschoolers, who had been introduced to osteopathy during a talk at antenatal classes during her second pregnancy. Amy experienced approximately six osteopathic treatments during her third pregnancy with the first two to three treatments occurring between thirteen and twenty weeks gestation and then again in the weeks leading up to delivery. Amy had been treated with cranial osteopathy for migraines, elbow bursitis and general aches and pains throughout her pregnancy for which she had success:

“I had problems with one of my hips being really sore and I found that I got a lot of relief with osteopathy with my second pregnancy. And just in general, not being pregnant, the relief that I found, I knew it would be helpful as well in pregnancy” (Amy, p. 3, lines 23-25).

Amy was very timid throughout the interview process and only gave brief answers. Consequently the researcher recruited another participant, taking the total number of participants from six to seven. This was due to the researcher feeling that the interview lacked in content and that points made served more to support the experiences of other participants.

Lucy

Lucy is a forty-eight year old mother of one much wanted child, who was conceived on their fifth round of IVF. Delivery was by emergency caesarean five weeks before her due date due to placenta abruption. Lucy’s brother is a long-time practicing cranial osteopath and was the primary osteopath that she sought treatment from, although this occurred later in the pregnancy. Earlier she sought treatment from another cranial osteopath whose treatments she was satisfied with. Lucy’s vast experience and ‘inside information’ regarding osteopathy was a strong influencing factor around her attitudes to and experiences of osteopathy during pregnancy. “I’ve known it [osteopathy] for such a long time. I mean, what? 20 years I’ve known about cranial osteopathy. And I believe I’d much rather go to an osteopath rather than a doctor, so for me, it’s a no brainer” (Lucy, p. 3, lines 6-8). Lucy experienced approximately 12 osteopathic treatments from 20 weeks gestation onward for numbness of the arms, reflux and oedema of the extremities. Understandably, Lucy felt anxious throughout much of her pregnancy.
Nicola

Nicola is a forty-two year old mother of three who had been treated by her osteopath for many years prior to her first pregnancy and continued to see him throughout all of her pregnancies. He used a mix of both structural and cranial techniques to treat an exacerbation of her “normal” (p. 2, line 5) musculoskeletal complaints due to the added demands placed on her body during pregnancy. This included lower back pain that progressed to thoracic and cervical pain if not treated. Additional to this Nicola also experienced tiredness and fatigue. Nicola felt her osteopath’s focus was on “what was going to work for me in my condition” (p.12, lines 21-24). Nicola was reluctant to undergo medical induction due to what she had heard from other women’s experiences but her obstetrician was unwilling to let her pregnancy go past 40 weeks gestation due to her age and the size of her baby. Consequently Nicola also used osteopathy for labour induction in the hope osteopathy could encourage her to go into labour naturally, however medical induction was still required. During her third pregnancy, Nicola experienced approximately seven osteopathic treatments in the final two trimesters of her pregnancy.

Lauren

Lauren is a thirty-three year old mother of one who sought osteopathic care during her pregnancy following pubis pain at six months gestation. On communicating with her obstetrician who recommended she seek physiotherapy for this complaint, Lauren chose to return to her osteopath for treatment. Alongside pubis pain, Lauren also experienced morning sickness, metal taste in her mouth, fatigue and pre-eclampsia. Once Lauren’s pubis pain resolved she continued to see her osteopath up until her due date for preventative care, having approximately eight structural osteopathic treatments in her last trimester. “I went to him and said I hear you’ve got the hands of God [name of osteopath]! (Laughs) Yes, the hands of God. I’m never going to let him live that down because that’s so ridiculous (laughs)” (Lauren, p. 19, lines 19-20).
CHAPTER FIVE: THE WOMEN’S EXPRESSION OF OSTEOPATHIC CARE DURING PREGNANCY
Following the participant introductions, we move on to the results of the thematic analysis process, as outlined in the methods section. Prior to detailed discussion of the themes, this chapter revisits the research aim and includes an introduction to the themes identified. Each theme is then presented in detail and linked to participant dialogue.

**INTRODUCTION TO THE THEMES**

The aim of this study was to identify and explore the attitudes and experiences of women to osteopathic treatment during pregnancy and any relationships these may have with their quality of life and birth experience. Themes identified include: **The accessibility of osteopathic care, Quality of life, Security during a period of change and uncertainty in life and Making sense of the experience.** The themes that arose throughout the process of thematic analysis in this study differed from other phenomenological studies due to the phenomenon studied being bounded by the physiological process of conception and birth. This, supported by the retrospective study design, resulted in the participants being able to reflect on their experience of the phenomenon. The retrospective design and the time-bounded physiological process of conception and birth affected the themes that arose, and resulted in them exhibiting a linear pattern. Figure 1 helps to illustrate this process outlined below and to allow the reader further understanding on how these themes developed.

![Diagram](image)

*Figure 1. Diagrammatic expression of the relationship between the themes.*

The first theme, **The Accessibility of Osteopathic Care**, identifies the main barriers women experienced in accessing osteopathic treatment during their pregnancy. It is likely that the factors identified are not only applicable to women during their pregnancy, but to members of the general public seeking osteopathic treatment. Due to accessibility issues providing a barrier to accessing osteopathic care, this was identified as the antecedent, preceding the remainder of the themes.
The second theme, **Quality of Life**, reveals the impact pregnancy complaints had on the quality of life of the participants and the relationship between osteopathic treatment and an improvement in pregnancy complaints. It was found that an increase in ability to function associated with osteopathic care reduced stress, thus improving their quality of life. Additionally, an increase in ability to function allowed the women to continue with the duties associated with their roles of being a mother, partner and work colleague. An ability to complete these duties reduced stress, further supporting an increase in quality of life.

The third theme, **Security during a Period of Change and Uncertainty in Life**, identified certain aspects of personal security that were important to the women during their pregnancies. There appeared to be a general sense of uncertainty regarding how the rest of their pregnancy and childbirth would go and osteopathic care appeared to offer some security around this.

The fourth theme, **Making Sense of the Experience**, was the concomitant theme. As mentioned above, pregnancy is an event with a distinct beginning and end and participants were therefore able to reflect upon their experiences of the phenomenon. This theme focused on the women’s experiences of manual therapy prior to pregnancy and the attitudes influenced by these experiences. Furthermore, the relationship this had on their attitudes to, and their experiences of, osteopathic treatment during pregnancy was examined.

**THEME ONE:**

**THE ACCESSIBILITY OF OSTEOPATHIC CARE**

The concept of accessibility arose in some form for all participants and was identified as being the antecedent to the attitudes to and experiences of osteopathic treatment during pregnancy. The women in this study had overcome these accessibility issues to some degree and thus were able to reflect on the impact these had on their ability to access osteopathic treatment during their pregnancy. Subthemes of Accessibility included; ‘cost’, and knowledge of the public and other healthcare providers regarding what osteopathy is and how it can be of help.
**Cost**

The cost of seeing an osteopath was identified as a limiting factor for women during pregnancy. One of the main reasons for this was that many of the women were soon to be on maternity leave and therefore preparing to become a one-income family. In New Zealand osteopathy is part of the private healthcare sector and as such, this is reflected in the prices. The cost of osteopathic care can vary and depends on where osteopaths are practising, whether in small towns or larger New Zealand cities. In largely populated areas such as Auckland, the city all participants lived in, costs tend to be higher:

“That [cost] was a big thing and probably the reason why I haven’t been so much since then is you know, we’re a one income family now, so if I’ve got body aches and pains I just sort of suck it up because I can’t afford to go.” (Jane, p. 6, lines 26-29)

“If you have less disposable income you’re less likely to maybe pay for something that’s preventative.” (Lauren, p. 13, lines 1-2)

It was recognised by the participants that not only access to treatment was impacted by cost during pregnancy, but that this carried through postnatally, affecting themselves, their infant and other family members.

Even if the value of treatment is recognised, the cost is prohibitive for many families. In some situations, for example, when an accident or injury precedes the onset of symptoms, some of the burden of cost can be reduced by subsidised treatment through the New Zealand Accident Compensation Corporation (ACC) and/or insurance cover. However for many New Zealand families the cost of health insurance itself is prohibitive.

Many families are on one income during the stages of pregnancy and childbirth in order to enable a parent to care for their children at home. During this time the need for healthcare is great and there are many costs associated with this. Subsequently the cost of private healthcare may be beyond the financial means of many families.

**Public and Other Healthcare Providers’ Knowledge of Osteopathy**

The knowledge of osteopathy as a profession by healthcare providers and the general public was identified as influencing the accessibility of osteopathic treatment to women during pregnancy. Many participants perceived a lack of knowledge by other healthcare providers regarding what osteopathy is, and what it has to offer, as a factor limiting their access to
osteopathic treatment during pregnancy. Primary healthcare providers identified within this group included general practitioners, obstetricians and midwives. Alongside this was the idea of osteopathy being perceived as alternative medicine by both the general public and other healthcare providers, thus it had the potential to be seen as not as reliable or effective. Knowledge of osteopathy was influenced by perceptions of osteopathy and limitations in knowledge and understanding of osteopaths’ scope of practice. As such, these factors served as a basis for further division within this subtheme.

**Perception of Osteopathy**

Attitudes held by other healthcare providers, family and friends influenced the women's ability to access osteopathic treatment during their pregnancy. The participants had similar views regarding the perception of osteopathy by the wider medical community. The comments from Emily and Lauren below are representative of this:

“I was a bit closed minded I wouldn’t have tried one [an osteopath] unless she just happened to be right there available. It’s a shame really that people don’t know more about osteopaths or are not willing to try them; give them a go. If my midwife had suggested that I went to see one I would have gone, I just can’t imagine my GP ever in a million years recommending me to go and see one. It’s such a shame. At least ACC recognises osteopaths, because it wasn’t that long ago that they weren’t even covered by ACC so it obviously is becoming more mainstream now. It’s just getting it out there isn’t it for people to realise that actually, they’re really good.” (Emily, p. 11, lines 7-31)

“If I didn’t know anything about osteopaths and I was going into it blind I probably would have gone with a physiotherapist because that’s what tends to be the perceived wisdom from ah, especially from, I guess, from my obstetrician.” (Lauren, p. 5, lines 4-6)

“I think some people don’t realise that osteopathy is actually really good. I think some people think it’s a bit ‘woo woo’ (laughs).” (Lauren, p. 17, lines 6-7)

The perception of osteopathy as an alternative health care option by the public and wider medical community affected the women’s ability to access osteopathy throughout their pregnancy. This lack of knowledge or endorsements from other trusted health care providers resulted in the women viewing better known manual therapies as being the ‘perceived wisdom’ by their healthcare providers. This lack of knowledge extends to the scope of osteopathic practice, as discussed below.

**Scope of Practice**

The limited knowledge that other health care providers and the general public had about the scope of osteopathic practice also provided a barrier for pregnant women’s accessing
osteopathy during pregnancy. Although the women in this study overcame most of their accessibility barriers, enabling them to have osteopathic treatment during pregnancy, it was identified that some accessibility issues still applied to certain participants. Some participants still had limited knowledge regarding the variety of interventions osteopathy could offer for pregnancy discomforts, outside of traditional ideas or what they had been treated for.

Despite receiving osteopathic care throughout her pregnancy, Lauren is still unsure what osteopathy can offer women during pregnancy:

“I imagine he’d probably do, well I don’t know, to be honest. I’d imagine he would probably work with backs, if you had backache and stuff like that.../... I know that they can treat kids with colic and all that kind of stuff but I don’t know about pregnancy.” (Lauren, p. 13, lines 10-15)

Emily experienced reflux during her pregnancy and despite having regular osteopathic treatment for pregnancy-related lower back pain, did not reveal this to her osteopath:

“But I didn’t even mention that [reflux] to [osteopath] actually. I just assumed that osteopathy was not going to do anything there. It’s also one of those things that yes it’s annoying but it ends as soon as the babies born so I didn’t mind.” (Emily, p. 9, lines 2-5)

Although Emily found the reflux to be annoying she did not mention it to her osteopath as she assumed it was not within the osteopath's scope of practice to offer any treatment related to reflux. The issues of knowledge and scope of osteopathic practice are further examined in the discussion chapter.

Knowledge of osteopathy by the public and other healthcare professionals alongside the cost of osteopathic treatment were identified as antecedents to accessing osteopathic treatment during pregnancy. If either of these identified factors offers a large barrier, women may be unable to access osteopathic care. If prenatal osteopathic care was not accessible, women may not have experienced the alleviation or reduction in severity of common pregnancy complaints, which improved their quality of life.
**THEME TWO**

**QUALITY OF LIFE**

The importance of quality of life has been well studied within many healthcare sectors. Osteopathy can offer a wellness approach to pregnancy, alleviating or reducing the severity of many common pregnancy complaints in a non-invasive and drug free manner. This allows for an improved quality of life, enabling women to maintain the duties associated with the roles they undertake in life such as partner, mother, daughter and work colleague.

The women in this study identified a relationship between osteopathic treatment during their pregnancy and an ‘Ability to Function’ which in many situations helped in ‘Reducing Stress’. Seeking osteopathic treatment for ‘Wellness and Preventative Care’ also helped to prevent the occurrence of common pregnancy complaints and was also used to increase the quality of life during pregnancy.

**ABILITY TO FUNCTION**

Many women discussed the severity of the pregnancy complaints they experienced and how these impacted on their ability to perform daily activities which were associated with the social roles they undertook, such as mother and work colleague.

The pain that Lauren experienced in her pelvis severely affected her quality of life:

“And I couldn’t, I couldn’t walk properly.” (Lauren, p. 2, line 21)

This was especially problematic as she did quite a lot of walking as part of her daily routine.

“I normally park the car a 15 min walk, a 15 minute brisk walk away from my work but I had to get my partner to drive me right into work. I couldn’t walk up and down stairs so I had to take the lift everywhere and it was, it was quite big.” (Lauren, p. 3, lines 22-25)

Lauren’s quality of life was severely impacted by her inability to accomplish her daily walk. Not only did her pain affect her ability to function, but it also impacted on her independence, as she required a greater level of assistance with daily activities than previously required.
Pregnancy complaints also impaired Emily’s ability to function, affecting her quality of life:

“In fact when I was really sick with this morning sickness my 6 year old said to his Dad, “Mum’s so lazy” and I thought oh, they’ve just got no idea. I thought gosh, so that’s how they view me, just lying in bed because I can’t be bothered getting up and I just want to have days and days and days on end in bed.” (Emily, p. 4, lines 2-5)

Emily felt that the impact pregnancy complaints had on her ability to fulfill her daily roles was large, and did not go unnoticed by her family. In order to fulfill her role adequately, Emily felt that she needed her pregnancy complaints to be managed to a level where she could still carry out tasks associated with her role:

“You need to be on your game, you know, to perform your duties and all that sort of stuff, otherwise it just drags you down if you’re in pain all day.” (Emily, p. 2, lines 14-15)

Having osteopathic treatment during pregnancy was found to improve the women’s ability to function, and concomitantly, her quality of life:

“I’ve always felt I’ve walked out and felt better than when I came in. Able to go back to functioning which when you’ve got kids, you don’t throw sick days. You can’t do sick days, you know, so I need to be functioning. And to have that relief so that my head can actually function because you know... you can’t think logically [when] the pain’s over the threshold.” (Nicola, p. 5, lines 14-18)

“The improvement has really been a sense of wellbeing and then physical, there’s just not the pain in my body that there was before.” (Ella, p. 4, lines 3-5)

The women in this study all found that osteopathic treatment during pregnancy had a positive influence on their common pregnancy complaints, improving their ability to function and resume activities associated with their roles. This had a subsequent affect on their quality of life. Some participants had sought osteopathic treatment for numerous pregnancies due to consistent success, whilst others continued to see their osteopath even when their presenting complaint had been relieved in a bid to reduce the likelihood of experiencing further pregnancy related complaints.

This improvement in the women’s ability to function had a positive effect on the quality of life experienced by the participants during pregnancy. This increase in quality of life was further supported by a reduction in stress.
**REDUCING STRESS**

It was found that an increased ability to function had an effect in reducing some aspects of physical and psychological stress within the women’s lives. By increasing their ability to physically comply with the demands daily life, they felt that they were better able to cope psychologically.

Emily had experienced pregnancy complaints in her earlier pregnancies, which she found to impact on her quality of life. Now that she had two preschoolers, the physical demands her body had to comply with, alongside pregnancy-related changes, had altered, influencing the impact that pregnancy complaints had on her life:

> “When I first had the osteopathy I possibly was pregnant at the time because I remember feeling a huge sense of relief that, thank goodness I’ve found someone, I’m not going to suffer through my pregnancies from now on, thank goodness that I’ve found someone who can actually treat me effectively.” (Emily, p. 5, lines 3-6)

Emily’s relief is further explained in the following excerpt where she discusses the impact an inability to function has on her stress levels:

> “I just can’t afford to be laid up, you know. That actually causes more stress, if you can’t attend to everything like you normally do.” (Emily, p. 3, lines 33-34)

It appears that there is a cyclical relationship between an ability/inability to function, stress and quality of life, with a decreased ability to function increasing physical and psychological stress and decreasing quality of life. Thereby it is likely that increasing one’s ability to function decreases stress (both physical and psychological) and increases quality of life. For these women, osteopathic treatments appeared to act as the catalyst in improving their ability to function.

This reduction in stress came as a relief to many of the participants who previously had been ‘soldiering on’:

> “The numbness had been there for awhile, maybe 18 months. But one of those things you just think, I must do something about, but you don’t. And it just continuously got worse and I thought – ‘No, I can’t do this’.” (Lucy, p. 2, lines 6-9)

For Lucy, pregnancy was the trigger to seek help for the numbness she experienced in her hand. Throughout the pregnancy the severity increased and she recognised she could no longer ‘soldier on’ with the numbness any longer. It is plausible that pregnancy further exacerbated this problem, which may have otherwise remained the same, as carpal tunnel syndrome is
common amongst pregnant women. Together, they reduced her ability to function. Having treatment improved function and thereby reduced stress for Lucy.

Stress was also reduced due to the effectiveness of the treatments the women received. To have their pregnancy complaints relieved after only a couple of treatments were of great relief. Finances were also important here, as fewer appointments meant less cost, and for the families with many older children, less appointments also meant less money spent on childcare while they were at their appointments:

“It was so effective, I didn't need to go back more and more and more. And as I say with me having preschoolers - that actually reduced a lot of stress knowing that I would probably only have to go for one appointment, or maybe two. But as opposed to physio where, I mean, you know, weeks and weeks and weeks and weeks that you need to you know, continue to go, and it's just not as effective.” (Emily, p. 4, lines 20-24)

A reduction in stress improved the quality of life for participants whilst they were pregnant, potentially making pregnancy a more enjoyable experience. Due to the benefits gained from osteopathic treatment during pregnancy many women chose to continue with osteopathic care for preventative and wellness care.

**Wellness and Preventative Care**

Many women continued to see their osteopath following the alleviation of their pregnancy complaints to prevent any further pregnancy complaints from occurring. This preventative approach was part of the attraction of osteopathy for some participants:

“I had an injury because my joints were all loose and so I had a choice between an osteopath or a physiotherapist. And I didn't want to go with a physiotherapist so I went with an osteopath because, because I think that often physiotherapy fixes a problem but osteopathy can fix a problem, but it also is preventative” (Lauren, p. 1, line 22; p. 2, line 3)

As this was Lauren’s first pregnancy, she felt unsure about how pregnancy related complaints would affect her:

“You're not quite sure what your body is doing. You read about symptoms that you're possibly going to feel because you've got a massive baby growing out the front of you and I just knew that any symptoms I had would be the least amount of symptoms because my body was being taken care of, all that structure and everything was being taken care of.” (Lauren, p. 9, lines 11-17)
Lauren felt that osteopathic treatment decreased the severity of pregnancy complaints that arose throughout her pregnancy by helping her body better cope with the physiological and biomechanical changes:

“I’d do it preventatively. Next time because I didn’t really, I mean I knew that you had relaxin? but I didn’t really think it was, I didn’t really take it very seriously, I didn’t actually think it would really have an effect. And now I’m like oh no, it does! So I’d definitely do it again and especially if you have got, like you’re getting all that relaxin again and you’ve got a toddler so you’re running around and possibly picking them up and I think there’s a whole other issue of different things that could go wrong.” (Lauren, p. 16, lines 7-12)

Prevention of postnatal musculoskeletal discomfort was part of Ella’s reason for seeking osteopathic treatment during pregnancy:

“It was for my pregnancy but also for this part now, postnatally because I had so much pain in my body when my first son was this age [three months] and small and breastfeeding that I felt like I couldn’t enjoy him as much as I wanted to, so I guess it was preventative.” (Ella, p. 4, lines 8-10)

Both Lauren and Ella found the wellness care that osteopathy offered beneficial in decreasing the severity of pregnancy complaints and post-natal discomfort by allowing their bodies to better cope with the demands placed upon it during pregnancy and post delivery.

Maximising quality of life was important to all participants throughout their pregnancy. By increasing the participants’ ability to function and reducing biomechanical and psychological stress, the women felt their quality of life was improved. As shown above, this was especially beneficial when coupled with wellness and preventative focused treatment. The following section further explores the psychological benefits of osteopathy during pregnancy and the security osteopathic care during pregnancy offered women.

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7 Relaxin is a naturally occurring hormone released in greater quantities in the final trimester of pregnancy. It increases the elasticity within muscles and joints, aiding in childbirth (Saladin, 2004).
Theme Three

Security during a period of change and uncertainty in life

The participants in this study found that osteopathic treatment during pregnancy provided them with some form of security during this special phase of life. As pregnancy and childbirth are unique physiological stages of life and all women’s experiences are considered individual, many women sought some form of security to help support them through the remainder of pregnancy and prepare them for childbirth. Security was further broken into three sub-themes; reassurance, safety and trust.

Reassurance

Reassurance was found to be an important part of the consultation for women who had osteopathic treatment during their pregnancy. The aspects of reassurance that appeared to be of greatest importance were they were physically and psychologically prepared for childbirth. Reassurance has links with osteopathic treatment for preventative measures. For some women, it appeared part of the reason for seeking preventative osteopathic care was for reassurance. It is not know from the data gathered in this study which components of reassurance, be it psychological or physical, were the most valuable to women during their pregnancies.

Reassurance was of great importance to Ella as part of the osteopathic care she received during her pregnancy. Despite good treatment outcomes, the lack of reassurance with one osteopath led her to seek another:

“I was planning for a home birth so I wanted someone who was into that and supportive of that and someone who I felt not just professionally but personally, was enthused by working with someone who wanted that... um but when I said ‘home birth’ I could almost feel him balk and so I thought ok, this is not quite right. I felt great after the session, but yea, it just didn’t feel quite right.” (Ella, p. 2, line 15)

This shows that although Ella responded well to this osteopath’s treatment, it was not enough to outweigh the fact that he was not comfortable with, and therefore supportive of her birth plan. Ella’s birth plan was of great importance to her and it is likely that she was hoping the osteopath would reassure her about her birth plan choices.
Other participants also sought reassurance as part of osteopathic care during pregnancy. Lucy discusses below the importance this aspect had in reassuring her she was “doing everything possible for a good pregnancy and a healthy baby:”

“It was just more peace of mind knowing everything’s okay and that I was doing everything possible for a good pregnancy and a healthy baby. And for me there was just no choice, you just do that because you just want everything to be good and that the baby is safe and that everything is all okay. I mean everyone’s different and every-body is different and everyone has their own little aches and pains and things going on but I just wanted everything to be the best it could be.” (Lucy, p. 13, lines 5-13)

Whilst Ella sought reassurance from her osteopath, for Lucy reassurance was found in receiving osteopathic treatment itself. Lauren also found osteopathic treatment to be reassuring. It appeared its greatest importance was in assuring her that she was physically prepared for labour and childbirth, which supported her psychologically:

“Once I started going to [name of osteopath] regularly I didn’t actually have to think about whether my body was working or whether it was going to crap out or whether there was going to be some other issue that came up. Because I knew that I had out-sourced that issue to somebody else, to him, so I didn’t even think about it, it [osteopathy] was really good like that.” (Lauren, p. 9, lines 5-9)

“I was going into the birth and I knew that everything was kind of in alignment so everything was you know, optimum for [name of child] to come out.” (Lauren, p. 8, line 25; p. 9, line 2)

For Lauren, osteopathy was found to be reassuring both throughout her pregnancy and in labour.

Below Ella and Lucy also reflect on how reassurance helped them to feel more secure with the process of pregnancy and childbirth:

“I think it just helped me feel quite calm internally which definitely helped. I still had a bit of chatter in my head of you know, what ifs.... But I think it just helped me to feel quite calm and confident in myself and what I had to do.” (Ella, p. 7, lines 17-19)

“I felt more secure that everything was all okay.” (Lucy, p. 13, lines 1-2)

Reassurance was an important aspect of osteopathic treatment for women during their pregnancy in assuring them they were physically and psychologically prepared for the remainder of their pregnancy and childbirth. Safety was also found to be an important aspect during this stage of life, which in some circumstances offered further reassurance.
SAFETY

There were two main aspects to the safety of osteopathic treatment during pregnancy. The first concern was that osteopathic treatment was safe; that it would not have an effect on pregnancy to the detriment of the child. The second was that osteopathic treatment was viewed as a safer alternative for pain relief during pregnancy, as opposed to taking medication.

Osteopathic treatment during pregnancy has not been associated with miscarriage. Nor is it considered to have any adverse effects on the unborn child or to compromise the safety of the pregnancy (Sullivan, 1997). However, many osteopaths prefer not to treat women during the ‘sensitive stages’ of pregnancy (8, 12 and 16 weeks), as this is when a spontaneous abortion is most likely to occur (S. Sandler, personal communication, March 19, 2010; Sullivan, 1997). Understandably however, the safety of osteopathic treatment during pregnancy was something that many women questioned their osteopaths about, even though some had not considered osteopathic treatment to be unsafe and therefore had not concerned themselves with this matter previously.

When Lauren was asked whether she had any concerns about being treated in a manual way during her pregnancy, her reply suggested that safety issues around this aspect were not an issue for her:

Researcher: “So in terms of already having quite a good relationship with your osteopath do you think if you hadn’t seen them before there would have been any fear or trust issues associated with being treated in a manual way whilst being pregnant?”
L: “No. Well I don’t have any issues with that anyway (laughs).” (Lauren, p. 5, lines 14-19)

Nicola however, was a lot more concerned about the safety of osteopathic treatment during her pregnancy for her unborn child. Good communication and reassurance regarding the safety of osteopathic treatment appeared to be enough to put Nicola’s mind at ease:

“You work so hard with your food intake and what you can and can’t eat. You don’t want to put your baby in any harm because it’s a long journey from start to finish so you don’t want to put that in jeopardy. So obviously for a practitioner they’d have to be a lot more in tune with the person and to really talk things through more than possibly with somebody who was coming to them who wasn’t pregnant. I would feel that you’d have to explain a lot more because there would be concerns there and the concerns could put the patient under stress that, you know, could actually negate what you’re doing for them.” (Nicola, p. 8, lines 21-27)

“I certainly recommend it to people but I think the big thing would be in my head is knowing the practitioner, because when you’re pregnant you’re very, very delicate as it is, protective is probably the better word, because you’ve got this new life inside you and you
don’t want it to be harmed, so I don’t know… if I hadn’t been going to an osteopath beforehand I don’t know if I would’ve said hey yeah, I’m really happy to go, if I hadn’t had adjustments done when I wasn’t pregnant, on a regular basis. So for somebody who’s never been exposed to it, it might be a bit scary, you know whereas when it’s just you, you’re not quite as protective.” (Nicola, p. 8, lines 7-13)

Contrary to Nicola, Emily viewed osteopathy as a safer alternative to pain relief than medication for her and her baby pre and postnatally.

“I just felt good about having effective treatment without taking medication, that was the biggest thing for me.” (Emily, p. 9, lines 10-11)

“Although the osteopath’s really good during pregnancy, I think also after having the baby’s good as well, because again, I don’t really want to take anti-inflammatories and that sort of stuff when I’m breast feeding. So just being able to go and see [the osteopath] again and use drug free pain relief is such a great thing, it’s fantastic. Because every corner you turn, you know if you go and see a doctor they’ll offer you some medication and I think, you know actually you don’t need that. It’s just tapping into the right people can make a big difference.” (Emily, p. 7, lines 22-28)

The safety of osteopathic treatment during pregnancy is a critical issue, with many women like Emily looking for an alternative to pain relief medication. Underpinning the issue of safety is trust. Women who had a trusting relationship with their osteopath were much more likely to feel comfortable about having osteopathic treatment during their pregnancy.

Trust

The women in this study discussed the importance an ability to trust their osteopath had on their osteopathic treatments during pregnancy. The aspects of trust linked in strongly with safety. Nicola came to appreciate the trusting relationship she had with her osteopath following a series of treatment reactions when she saw another osteopath prior to her pregnancy.

“The guy [another osteopath] that I had used previously but I said I didn’t feel entirely comfortable with, I wouldn’t see him through my pregnancy. I made that choice because I just felt that he had been too rough. He probably hadn’t but I felt confident that [osteopath] would only do what he needed to do and would be mindful of my condition. I wouldn’t have gone to a chiropractor while I was pregnant but the way that [osteopath] did the adjustment and his knowledge of what to do, I had no hesitation and I just knew that he would only do what needed to be done to get me through and to let my body cope with what it was doing. (Nicola, p. 4, lines 15-22)

Understandably, Nicola felt protective of her body during pregnancy, something that was amplified by her previous undesirable experiences with another osteopath. Nicola had
confidence in her osteopath’s knowledge and abilities and trusted he would be considerate of the changes her body was experiencing throughout her pregnancy.

The trusting relationship that was established during treatments prior to pregnancy had an effect on the trust the women had in their osteopath’s ability to treat them during pregnancy as well. Women who had experienced positive results from their osteopath previously were much less concerned about having osteopathic treatment during pregnancy:

“I was never questioning, which is probably why I don’t have more things to say to you because I just went to him and was like ‘here I am, go.’ And then I just turned off my brain.” (Lauren, p. 19, lines 23-25)

“I go to [osteopath’s name] with the expectation that he will find anything that’s going to be an issue, and fix it. Because I don’t know, you know I don’t know about my structural skeleton and stuff but he’s very good at finding, you know, like your back is slightly out so I’ll just put that back in and then it won’t, you know, get any worse and stuff like that.” (Lauren, p. 6, lines 23; p. 7, line 2)

“He’d say ‘look, that’s not quite gone in, it still needs one more, but in my experience if I try and do it, it’s not going to go and if I try and do it, it’s going to knock you about’ and he’d stop and wait for what he’d done to settle and have me come back a couple of days later. And then that adjustment could be done, which I suppose for some people they’d say well now I’ve had to pay for two appointments, you are just trying to get extra business out of me. But I always trust what [osteopath] says because he knows me so well and he knows when to stop and it’s not that he’s doing it to get extra revenue to get me back another time, it’s because he knows.” (Nicola, p. 2, lines 24-30)

Nicola relates the importance of a trusting relationship with her osteopath to that of a general practitioner:

“Well it’s like a doctor isn’t it? You know, you don’t flick and change your doctors. You find someone that you trust, you know, it’s your wellbeing that you’re dealing with. He knows our family. I think that that background is really important.” (Nicola, p. 3, lines 21-24)

Even when the women did not understand how techniques worked, the trust they had in their osteopath resulted in them being unconcerned by this lack of understanding and happy to continue with treatment anyhow. In these situations, the trust they had in their osteopath was further supported by the result they had from treatment:

“You know, it’s not my job to understand what goes on there, I just need to know that I feel better when I walk out the door.” (Ella, p. 3, lines 15-26)

“Coming from a nursing background, I don’t understand the harmonics [a treatment technique] side of things, I don’t really understand that but I just trust that she’s... I get a good result so that’s all that matters to me at the moment.” (Emily, p. 6, lines 21-23)
It’s just things that she’s done have seemed to work and she seems to be very competent and good at what she does." (Amy, p. 5, lines 19-20)

A trusting relationship between patient and practitioner is an important aspect of the therapeutic relationship in any healthcare modality. As expressed by Nicola above, a previous bad experience can have huge consequences on the relationship between patient and practitioner and deter the patient from seeing that practitioner again. This is further examined in the following theme where participants reflect on previous manual therapy experiences and how this influenced their attitudes to and experiences of osteopathy during pregnancy.

**THEME FOUR**

**MAKING SENSE OF THE EXPERIENCE**

As discussed in the introduction to this chapter, the attitudes to and experiences of osteopathic treatment during pregnancy was an interesting topic to study due to the distinct beginning and end the process of pregnancy has. As this was a retrospective study, it meant that the participants were able to reflect on their experience of pregnancy, osteopathic treatment during their pregnancy and their childbirth experience. This is unique in comparison with many qualitative research projects, as most studies involve participants who continue to experience the phenomenon studied.

The subthemes of ‘making sense of the experience’ include: a comparison between other manual therapy experiences and ‘positive results’ experienced from osteopathic treatment during pregnancy. Additionally, an apparent contradiction arose in the final subtheme. Osteopathic treatment during pregnancy was found to be no different from osteopathic treatment at any other stage in life, yet a change in treatment techniques and positions was experienced.

**PREVIOUS MANUAL THERAPY EXPERIENCES**

The experience women had of manual therapy prior to osteopathic treatment during pregnancy had a huge impact on the way they viewed osteopathy as a profession and osteopathic treatment during pregnancy. Many of the women reported a greater effectiveness with osteopathic treatment compared to their experience with other manual therapies. For some, it
was this lack of effectiveness that resulted in them actively looking for an alternative manual therapy, such as osteopathy:

“I think that’s why I suffered so much during my earlier pregnancies, because I couldn’t take anything and physio just wasn’t cutting it, so I just had to put up with it.” (Emily, p. 4, lines 17-18)

“We were looking for a better solution than chiro.” (Ella, p. 4, line 11)

“The reason why I went, I chose osteopathy was because massage, pregnancy massage just wasn’t quite cutting it. I had a few not very good quality experiences and I had been to the osteo before so I thought I would just go and see [osteopath] again. I felt a lot better after coming out of having osteo treatment rather than massage.” (Jane, p. 1, lines 11-13)

“I’ve had lots and lots of physio, ongoing, ongoing, stop, start, stop, start and just never really had great success with it.” (Emily, p. 1, lines 20-21)

“I mean it was really dramatic, the result actually, and I was just totally hooked after that. Just one treatment, I couldn’t believe it. Such a huge difference that physio’s just couldn’t achieve.” (Emily, p. 1, lines 24-26)

Additional comparisons to other manual therapies included that they were associated with greater levels of pain and discomfort:

“I was just really sore after each session, for sort of two or three days, really sore and it just didn’t feel right to have that sort of pain after something that’s meant to be making you feel better.” (Ella, p. 1, lines 19-20)

“Chiropractic care was weekly because I was always in pain. I’d go because I was sore, I’d be sorer for three days, then I would feel a little bit better for a few days and then I would be sore again and go back. It just seemed a cycle.” (Ella, p. 4, lines 23-26)

“Chiropractic I find is just too aggressive for me. It’s just ‘snap’ and I often come out dizzy and feeling a bit nauseous. I just think it’s too hard for me” (Jane, p. 3, lines 13-15)

“With the chiropractic I just found it was, I mean they do the adjustment, I found it was too rough and they didn’t sort of deal with the muscular side of things. It was all based on releasing the joints, whereas [osteopath] does a bit of a massage and just gives you a bit of you know, releases some of the pressure within the muscles. I found that [with] chiropractic you didn’t even get that release of some of the pressure within the muscle that I do through the osteo.” (Nicola, p. 4, lines 14-15)

Increases in the effectiveness of treatment alongside a decrease in pain in discomfort were some factors that comprised a positive result of osteopathy during pregnancy compared to other manual therapies. The subtheme ‘positive results’ is further discussed below.
POSITIVE RESULTS

All of the women in this study felt that they got positive results from having osteopathic care during their pregnancy. As discussed in the Quality of Life section, for most patients, this was reflected by an increased quality of life, for others, it was that they felt osteopathic treatment during their pregnancy prevented or reduced the severity of pregnancy complaints.

A common idea that arose with a number of the participants is that the positive effects of osteopathic treatment may take a few days to show up:

“Oh hell yea. Like anything it took a while to go back in, but it really made a huge, huge difference. I mean I always find with osteopathy that the day you have it, it doesn’t necessarily feel like anything’s changed and then the next day it always feels worse, and then it’s normally the third day is actually when you feel the benefits from it.” (Lauren, p. 6, lines 8-12)

Whilst this was a common idea amongst participants, Nicola used the immediate results she experienced as a measure of her osteopath’s ability:

“A lot of people are aware that with osteopathy you might not feel the effects until maybe the next day. With [osteopath] I felt that normally if I’d gone to him in the morning, by the afternoon I’d feel back to fairly much normal which is really unusual. In some situations you normally walk away and you feel a bit more knocked about for the initial stage until your body sort of comes back into alignment and adjusts with the adjustments. With him I find that normally I’d walk out the door feeling a heck of a lot better than when I walked in and within a couple of hours it would be like better still. I’d be back to fairly much 100% by the afternoon. Two to four hours later I was back functioning.” (Nicola, p. 5, lines 1-8)

Amy and Ella further discuss the positive results they experienced from osteopathic treatment during pregnancy:

“I had problems with one of my hips being really sore and I found that I got a lot of relief with osteopathy with my second pregnancy. And just in general, not being pregnant, the relief that I found, I knew it would be helpful as well in pregnancy.” (Amy, p. 3, lines 23-25)

“The improvement has really been a sense of wellbeing, there’s just not the pain in my body that there was before.” (Ella, p. 4, lines 3-5)

The positive results achieved with osteopathic treatment during pregnancy were found to be similar to those achieved when not pregnant. The similarities and differences between osteopathic treatment during pregnancy and at another life stage are further discussed in the section below.
Many women seemed surprised when questioned how their experience of osteopathic treatment was during pregnancy in comparison to the osteopathic treatment they had experienced when not pregnant. Lauren appeared to verbalise what many of the women were thinking when posed with this question: “I didn’t think about it being any different” (p. 7, line 25). This point of view did not appear to be influenced by the ‘style’ of osteopathic treatment experienced, structural or cranial. Lucy also held this viewpoint and did not see pregnancy as any reason for her experience of osteopathic treatment to have changed:

“Probably the same, yea, I’d say the same. It would be because what would have changed? I can’t sort of think that it was different, no, not that I noticed in a conscious way.” (Lucy, p. 12, line 28-31)

“The difference was that, well there was no difference really. The only difference was the fact that you had to be helped onto the table but apart from that there were no issues.” (Lauren, p. 4, lines 12-13)

Interestingly, Amy assumed a link between her experience and her practitioner:

Researcher: “Did you find much of a difference between the treatment you experienced during your second pregnancy verse your third?”
Amy: “You mean as in what I was treated for or how?”
Researcher: “How your experience of it was.”
Amy: “No, it was still with the same person so....” (Amy, p. 1, lines 7-11)

While the above statement relates to Amy comparing her treatments during separate pregnancies, it would be interesting to see if she still held this viewpoint when comparing her treatments during pregnancy to those when she was not pregnant, as these also occurred with the same practitioner.

Emily took a slightly different viewpoint, relating her experience of osteopathic treatment during pregnancy to treatment outcomes:

“It didn’t seem to inhibit my treatment at all being pregnant.” (Emily, p. 6, lines 3-4)

For Emily, the outcomes of treatment met her expectations and she therefore considered osteopathy during pregnancy to be not different.

Despite the women of this study not feeling that their experience of osteopathic treatment was any different during their pregnancy, they did notice some changes in the way the osteopath
treated them. It is interesting that they do not relate these changes to having an effect on their experience of treatment.

Here Lauren discusses how her osteopath overcame any positional issues that arose while treating her during her pregnancy.

Researcher: “Do you think that the treatments were just as affective when he was limited in the positions that he could maneuver you around in?”
Lauren: “Yes, because he just did it one side at a time, rather than doing it, well he would still have to do a side at a time but he did a whole side and then flipped you over and then did the other whole side. And yea, it was fine.” (Lauren, p. 7, lines 19-23)

Jane’s osteopath also managed to overcome any positional issues.

“Just the way I was laying I guess and the way she went down my spine and everything, normally I’m laying on my stomach. She was able to still do everything but just do it in a different way which is really good.” (Jane, p. 2, line 7-8)

Nicola felt that her osteopath took her pregnancy into consideration when deciding how best to treat her during her pregnancy. The below comments show how Nicola felt her osteopath expected different results from his treatments during her pregnancy and changed his treatments accordingly:

“I think it was just [osteopath’s] focus on where I was at rather than what he was trying to achieve, because obviously what you are trying to achieve on somebody who is not pregnant and what you can achieve on somebody who is, it’s a different balance. So I think it was his focus on what was going to work for me in my condition.” (Nicola, p. 12, lines 21-24)

“I mean he was very aware if my body was under stress that he didn’t want to exacerbate that and possibly when there would be a situation if I hadn’t have been pregnant that he would have gone one step further, he pulled it back a little bit or did it a little bit differently. Maybe not have the exact same effect but to be as close to without putting me in harm or the baby in harm or overdoing it so that my body was even more stressed...//... He’d do similar techniques but he definitely held back more and was mindful of my condition which was understandable because you know, some of the manipulations when you’ve got a big bump they can’t get them to work the same way either. So he’d do um, instead of trying to do an adjustment he’d do a stretch.” (Nicola, p. 4, lines 25-38)

It was this mindfulness that was reassuring to Nicola. Interestingly, she felt that the osteopathic treatment she experienced was a compromise on the osteopathic treatment she experienced when she was not pregnant. This idea did not come up with any of the other participants. It is not known whether this attitude is based on a change in techniques from what she expected or whether it was due to a decrease in effectiveness of treatment or both:
“He fairly much did similar sort of things but sometimes he couldn’t quite get the maneuverability because there was a bump in the way that was restricting that particular movement from happening. So to do the stretches and have the effect that way, like I said not maybe to 100% as if an adjustment had been done, it’s a compromise. It’s like when you’re pregnant you can’t take certain drugs, you know you can’t take certain prescriptions, so you can’t take your nasal sprays for your colds and things like that and so you make an adjustment and go to saline which doesn’t do the full job but it’s better than nothing.” (Nicola, p. 9, lines 10-16)

However, Nicola appeared to have the view that pregnancy generally compromised the treatment results you could obtain, including the use of pharmaceuticals.

The apparent contradiction of the differences and similarities between osteopathic treatment during pregnancy and osteopathic treatment at any other stage in life poses some interesting questions. It may be beneficial to further examine the factors that influence the experience of healthcare as the findings from this study show that changes in treatment approach did not appear to influence this.

The ability to reflect on ones experience once separated from the phenomenon was important in enabling these women to consider the events of pregnancy and childbirth and how osteopathic care influenced these. The concomitant theme, ‘Making sense of the experience’, links the themes together in a linear way, much like the linear flow of pregnancy and childbirth.

**Summary of the Findings**

This chapter presented the findings of the study, including the factors that resulted in barriers to osteopathic care during pregnancy and the benefits of osteopathic treatment during pregnancy once these barriers were overcome. While this study only identified restrictions associated with seeking osteopathic treatment during pregnancy it is plausible that these restrictions apply to a wider population of individuals seeking osteopathic treatment than solely women during their pregnancies. Benefits of osteopathic care during pregnancy included an increase in quality of life that allowed the participants to continue to function as mothers, partners and work colleagues, while also decreasing stress. The women found osteopathy during pregnancy provided security, reassuring them of their abilities as a mother, including their ability to cope with the remainder of pregnancy and childbirth. Reflection on their experience of osteopathic treatment during pregnancy found that the women experienced
positive results and that having osteopathic treatment during pregnancy was not greatly different from osteopathic treatment at any other stage of life. The following chapter discusses these themes in further detail and highlights additional information that warrants further discussion.
CHAPTER SIX: DISCUSSION
The following discussion examines the themes in further detail and discusses other ideas of significance that arose throughout the study.

**The Accessibility of Osteopathic Care**

The cost of osteopathic care alongside a lack of knowledge around what osteopathy is and how it can be of assistance were found to be central issues affecting the ability of women to access osteopathy during pregnancy.

**Cost**

The cost of osteopathic care was found to be a factor inhibiting women's access to osteopathy during their pregnancy. Lambert (2007) investigated factors which influenced osteopaths treatment fees. He found that these factors could be grouped into economic, ethical and personal or social factors. Economic factors included the osteopath's perception that their patients could afford them, that their pricing reflected what they felt their treatments were worth and that they could cover business costs. However, many practitioners felt uneasy about charging for their services. Ethical factors included the financial accessibility of their treatment for those in the community and their duty of providing a quality service that limited the number of patients they could see each week, impacting on their pricing. The importance of an honest and trusting relationship between patients and osteopaths was also identified and the impact this has on ensuring osteopathic care is not purely an exchange of fee for service. Personal or social factors included the necessity of exchange between patient and practitioner “to maintain the professional nature of the patient practitioner relationship” (Lambert, 2007, p. 55) and the importance of the osteopath's own quality of life.

As seen from the factors mentioned above, there are many aspects osteopaths need to consider when setting their treatment fees. Of direct importance to women’s ability to access osteopathic care during pregnancy is the osteopath’s perception that their patients can afford them. This has strong links with the osteopath's idea that their prices are financially accessible for those in their community. It is not known what factors osteopaths take into consideration when developing a perception of whether or not their patients can afford their services, nor those considered when evaluating the financial accessibility of their treatment for those in their community. Andrews, Peter and Hammond (2003) identified concern amongst private
healthcare providers for being unable to provide care to those who cannot afford it. Butler and Watson (2005) as cited in (Lambert, 2007) feel that osteopaths put other values, such as providing care to patients, ahead of monetary gain. Lambert (2007) had only one participant from six who offered reduced treatment fees to those who had minimal income, such as students and pensioners. Perhaps if more osteopaths offered pricing stratification osteopathic care would be more accessible to a wider portion of society. If this was extended to include pregnant women and those on maternity leave, it may result in osteopathic care being more accessible to women pre and postnatally.

Additional to cost, knowledge was also found to impact women's ability to access osteopathic care during pregnancy.

**THE IMPACT A LACK OF KNOWLEDGE HAS ON ACCESSIBILITY**

The lack of knowledge about osteopathy by the public and other health care providers affected the women's ability to access osteopathic care during their pregnancy. This lack of knowledge affected their perception of osteopathy as a profession and was found to include the scope of osteopathic practice. As articulated by Lauren below, some participants felt that many people perceived osteopathy as alternative: “I think some people think it’s a bit woo woo.” (Lauren, p. 17, line 3)

The idea of healthcare professionals lacking knowledge around the management of pregnancy complaints was identified by Vermani, Mittal and Weeks (2010) in their review of pelvic girdle pain in pregnancy. This lack of knowledge also arose throughout this study, but with reference to the management of pregnancy complaints in general. Many participants felt that there was a general lack of knowledge by other health care providers regarding the osteopathic profession and its scope of practice. It is plausible that much of this lack of knowledge stems from the profession itself, as there is much discussion amongst osteopaths regarding their scope of practice and currently, the Osteopathic Council of New Zealand are working on reforming this (Osteopathic Council New Zealand, 2010). As identified in the findings chapter, although the participants had experienced osteopathic care during their pregnancy, they too had limited knowledge regarding what osteopaths can treat during pregnancy. This brings about the questions, are osteopaths screening women during their pregnancy for pregnancy related complaints? Do osteopaths believe that many of these common pregnancy complaints can be influenced by osteopathy?
It is plausible that a lack of knowledge by the public and other health care providers about osteopathy has influenced the health care options women have available to them during their pregnancy. If more information was available about osteopathy as a health care modality it is hoped other health care providers and the general public would have more knowledge about osteopathy and what it can offer. As discussed in the findings chapter, the lack of knowledge around the scope of osteopathic practice limited the information that osteopaths received. Women assumed that osteopathic treatment would not be able to relieve them of their complaint or be of any assistance at getting it to a more manageable level and therefore neglected to mention these additional issues. It is not known whether osteopaths realise this lack of knowledge around the scope of osteopathy is present. Perhaps if osteopaths were aware of the lack of knowledge that existed amongst their patients around the scope of osteopathic practice they would spend more time discussing this. If osteopaths are unaware of this aspect it may offer a part explanation as to why the public and other healthcare practitioners have limited knowledge themselves. Lastly, do osteopaths in general believe that they can treat these common pregnancy complaints?

If information regarding the scope of osteopathic practice was more readily available, women's ability to access osteopathic care may be increased. Furthermore, if this information were shared with other healthcare providers, osteopaths and other practitioners would be able to work together with greater ease to ensure the best possible care for their patients. The following quote shows the importance a multidisciplinary health care approach played during one woman’s pregnancy.

“I was quite a regular visitor [to the clinic] because my midwife also worked from the same office as well. So I had my acupuncture, my osteopathy and my midwife all in the same clinic so that was really handy. It worked really well. They saw me quite a lot through my pregnancy.” (Nicola, p. 5, lines 34-36)

This situation was unique to the study although anecdotal evidence suggests it is becoming increasingly common to have multidisciplinary practices including osteopaths. It is assumed that alongside increasing accessibility, this would support a higher quality of healthcare as health practitioners are able to communicate more easily regarding patient cases if required.

**Availability**

Cost and knowledge were not the only factors identified as influencing the women's ability to access osteopathy during pregnancy. One participant found the availability of her osteopath
important in her ability to access osteopathic care during pregnancy. This idea did not arise with any other participants and was therefore not considered strong enough to be included in the findings. However it did highlight an important aspect that may not apply solely to women accessing osteopathy during pregnancy, or to osteopathy as a profession.

Many of the women found that pain and discomfort had a sudden onset during their pregnancy and therefore needed to access treatment quickly. Nicola found that her osteopath was often booked up many days in advance and as seen in the dialogue extracts below, was appreciative of his efforts to see her as soon as possible.

“*The most important thing I guess, particularly as a pregnant woman is the speed that you can be seen and [osteopath] was always very mindful of that and tried to fit you in as quick as possible because you are already uncomfortable, so I think you know, the speed of being able to be seen and treated in a timely manner particularly when you have got other kids to attend to, that is really, really important.*” (Nicola, p. 12, lines 27-31)

Nicola’s osteopath was aware of the demands she had in life and the importance an ability to carry out her daily tasks was to her. As shown below, Nicola’s osteopath knew her well and understands that if she was requesting an urgent appointment she was in a high level of discomfort.

“You’ve got to really pay attention to what’s signal you’re getting from your body, but like I said, [osteopath] couldn’t get over that I hadn’t seen this coming and I’d ring him up “help” and “can you see me” and he’d normally work things around if he could, and if not he would give me another idea of what to do.” (Nicola, p. 10, lines 23-27)

The support Nicola received from her osteopath is evident when Nicola says: “he’d normally work things around if he could, and if not he would give me another idea of what to do” (p. 10, lines 23-27). This shows that although he may not be able to treat her as soon as she requires, he offers her support in the form of other suggestions that may ease her discomfort until he can see her.

**QUALITY OF LIFE**

The importance of quality of life for patients has been identified in a multitude of healthcare conditions (Danforth, 1996; Foley, O’Mahony, & Hardiman, 2007; Overcash, 2004). It is difficult to offer predictors of quality of life as those experiencing different conditions place importance on different factors. The quality of life women experienced during their pregnancy was impacted to some degree by common pregnancy complaints. As expressed by Emily above, this impact affected her ability to function, which had a relationship with stress throughout her
pregnancy. Other participants reported similar experiences. For many participants, the affect osteopathy had on common pregnancy complaints influenced their ability to function and reduced stress levels resulting in some women choosing to use osteopathy for wellness and preventative care also.

**Ability to Function**

An increase in ability to function was found to positively impact on the quality of life of elderly following hip fracture (Zidén, Kreuter, & Frändin, 2010). Functionality was also important to women during pregnancy and was identified as being easily compromised by common pregnancy complaints. Osteopathy during pregnancy was found to increase the women's abilities to function. An increased ability to function improved the women's quality of life by allowing them to partake in a similar level of activity to what they were prior to pregnancy. Improvements in functionality allowed the women to resume daily activities, much of which related to their societal roles. Interestingly, the aspects of an inability to function appeared to be most concerning to the women if it impacted on their societal roles. Therefore, this had strong links with stress as an inability to function increased stress if they were unable to “attend to everything like you normally do” (Emily, p. 3, line 34).

**Stress**

“Stress is an interactive process in which the patient responds in predictable biopsychosocial ways to certain environmentally or internally mediated stressors” (Ward, 2003, p. 233). Lau and Yin (2011) investigated factors that caused perceived stress in women during pregnancy. Factors identified as increasing perceived stress amongst this population included young maternal age, single relationship status, lower level of education, long working hours, unplanned pregnancy, late initiation of prenatal care and poor physical or mental health related quality of life (Lau & Yin, 2011). Whilst few of these variables were applicable to participants of this study, common pregnancy complaints were attributed to causing both physical and psychological stress. Due to the biomechanical changes associated with pregnancy, a degree of physical stress was expected, however this could be exacerbated when pregnancy complaints increased in severity. Psychological stress was more common in participants who felt they were not physically able to attend to the things they normally would, or who were anxious about the remainder of their pregnancy and childbirth. Both physical and psychological aspects of stress
were illustrated by the women. Physical stress was experienced by Lauren, when pregnancy complaints exceeded her ability to carry out normal daily functioning, such as walking. Psychological stress was evident in the situations of both Lucy's and Emily. As Lucy had experienced difficulty conceiving, she harboured concerns about the remainder of the pregnancy and labour. Whilst Emily also experienced psychological stress, her concerns were related to her ability to continue to care for her family as she had experienced pregnancy and childbirth many times previously. This links with the following section where wellness and preventative care was used in pre-empting a stressful situation.

**Wellness and Preventative Measures**

Part of the attraction of osteopathy for many participants was the wellness and preventative approach that it can offer. What the women were intending to prevent with regular osteopathic treatment during their pregnancy varied and ranged from prevention of further pregnancy complaints to prevention of postnatal discomfort. Marchinko and Clarke (2011) found that a wellness focused management approach for those requiring mental healthcare improved the patients’ quality of life and increased their satisfaction with healthcare services. No literature was found on the costs of preventative or wellness healthcare versus the benefits, although this would be interesting to ascertain. It is plausible that the alongside the physical benefits of wellness and preventative osteopathic care during pregnancy that women may also experience psychological benefits. These are examined in the subsequent section.

**Security during a Period of Change and Uncertainty in Life**

Osteopathy throughout pregnancy was found to offer the women security during the remainder of their pregnancy and childbirth. Factors that influenced security included: reassurance, safety and trust.

**Reassurance**

Many of the women discussed how osteopathy during pregnancy reassured them about the remainder of their pregnancy and childbirth. The aspects of reassurance that appeared to be of
greatest importance to the women were that they were physically and psychologically prepared for childbirth. As introduced above, reassurance has links with preventative measures, as part of the reason the women continued to have preventative or wellness focused osteopathy throughout their pregnancy was that it reassured them about the remainder of their pregnancy.

For some of the women, reassurance was found in their interaction with their osteopath. It is assumed that this was due to the personal nature of the osteopathic setting, where women have longer appointment times to discuss matters of concern with a health care provider. Novick (2009) found that appointment duration was one of the factors influencing women’s experience of prenatal care. For other women, reassurance was found in the act of having osteopathic treatment itself and the influence this would have on their pregnant body. This idea of prenatal care providing women with a greater sense of control and reducing anxiety is not new to some (Oakley, 1992). Dragonas (1987) investigated Greek women’s attitudes to pregnancy, labour and their infant. The women’s need for emotional support was clearly expressed. Therefore, it is likely that when combined with routine prenatal care, osteopathic care offers women further support and reassurance. An aspect that arose with Lucy was that she was not only having osteopathy for herself, but also for her baby.

“Just for the pelvis and that everything was ok. I was so scared through the pregnancy, that would it be alright. I just wanted to do it for the knowledge of wellbeing, that the baby was in the best environment that it could be really. And that my body was coping with it. And that everything would be in the right place that it should be in. But then I knew also that I wasn’t going to have a natural birth, so I wasn’t sort of worried about that, I knew it was going to be the Caesar. So that eliminated the worry of that.” (Lucy, p. 9, lines 27-34)

“It was just more peace of mind knowing everything’s okay and that I was doing everything possible for a good pregnancy and a healthy baby.” (Lucy, p. 13, line 6)

Uniquely in this study, Lucy discussed the positive influence of osteopathy during pregnancy on her unborn child “that the baby was in the best environment that it could be” (p. 9, line 30). While the aspect of osteopathy for their unborn baby did not arise so directly with any other participants, it would have been interesting to establish who they are having osteopathy for and why. As seen in the extracts above, osteopathy played an important role in reassuring Lucy throughout her pregnancy in both her abilities to physically cope with the pregnancy and provide a nurturing environment for the development of her baby. For Ella, reassurance was also an important aspect of osteopathy during her pregnancy. This aspect arose in two ways. Firstly, Ella sought confirmation from other healthcare professionals she trusted regarding the osteopath’s abilities to treat women during pregnancy. She felt that this was confirmed by their opinions and the professional relationships the osteopath had with these other health care providers. As seen below, this multi-disciplinary healthcare approach was important to Ella and
subsequently it affected her decisions when choosing an osteopath to treat her throughout her pregnancy.

“Yeah, and that was part of what I wanted when I was initially looking for a good osteopath, is someone who you know is networked and nestled within a community who were like-minded but not necessarily doing the same thing.” (Ella, p. 12, lines 6-8)

“I think she also would have, you know, had I needed help from other therapists or people she would have been really great with putting me in touch with a whole community of people who are there to support women. I feel like she’s really got her finger on the pulse in terms of having that sort of support network, and acknowledging that osteopathy is not the only way ... I felt she was really well networked and surrounded by a good community.” (Ella, p. 11, lines 27-30; p. 12, lines 2-3)

This multidisciplinary and well network healthcare approach reassured Ella about her osteopath’s ability to treat her during pregnancy and reassured her about the quality of care she would experience. This aspect has links with safety, which is discussed in the following section.

Secondly, Ella wanted an osteopath that would be supportive and reassuring of her birth plan choices. As seen in the section on reassurance in the findings chapter, this was something she actively sought when choosing an osteopath and was of great importance to her. The importance of this was apparent when the unsupportive reaction of one osteopath caused her to seek another. The support and reassurance Ella received throughout her pregnancy was highlighted when her osteopath lent her a film on childbirth, that included births representative of Ella’s birth plan. This act of support and reassurance had a profound impact on Ella’s state of mind when going into labour.

“I guess it just helped me to feel part of it because I think when you say you want to have a home birth you’re part of a very small community when you do that and I think by watching this film and these births... you feel like, ‘ok, there is actually a whole heap of people out there doing this and I’m not a freak.’” (Ella, p. 12, lines 14-17)

“Giving me that film in the days before he was born was amazing... it just got me in the right place of really believing that the decision I’d made about the type of birth we wanted to have was the right decision and seeing these wonderful water births, it was definitely a positive frame of mind to be in before we were doing that ourselves.” (Ella, p. 11, lines 21-25)

Reassurance that they were physically and psychologically prepared for the remainder of their pregnancy and childbirth was found to be of great importance to the women in this study. For some women this reassurance was found through their interaction with their osteopath, for others it was in the act of receiving osteopathic treatment itself. The following section discusses the safety of osteopathic treatment during pregnancy.
**SAFETY**

Two main aspects arose in regards to the safety of osteopathy during pregnancy. Participants were found to only concern themselves with one of the following two aspects. The first was that many women queried the safety of osteopathy during pregnancy. The other aspect was that osteopathy was considered a safer alternative to pain relief than taking medication during pregnancy.

Whilst there have been no reports of osteopathy during pregnancy causing any harm to the mother or her baby, many osteopaths approach treating women during their pregnancy with additional care. Some participants viewed pregnancy as a “delicate” (Nicola, p. 8, line 10) time of life and felt that it was important that good communication was established between the osteopath and their pregnant patient in order to reassure the women of the safety of osteopathic techniques during pregnancy. This also helped to establish a trusting relationship between the woman and her osteopath:

“*I think it’s important for a pregnant woman to feel safe and if they hadn’t been before, if it was me, I would want the practitioner to be explaining that they’re only going to do the things that are not going to be harmful for the baby and that if at any stage that I felt uncomfortable, to let them know. That would be my feeling [if I was] somebody who’s never had it [osteopathy] done because that would be a big worry.*” (Nicola, p. 8, lines 15-19)

Conversely, some participants viewed osteopathy as a safer alternative to pain relief than medication during pregnancy. The Thalidomide tragedy in the late 1950’s which resulted in the birth of many babies with deformity is a relatively recent reminder to women about the side effects medication prescribed for common pregnancy complaints such as morning sickness can have on their unborn child. Whilst no other tragedy such as this has occurred since and all medication and pesticides are now more thoroughly tested for safety, this incident combined with the responsibility many women feel about ensuring their baby has a good start to life results in many women being extra cautious during pregnancy (Polifka, Faustman, & Neil, 1997). The dialogue below demonstrates that Emily is one of these women:

“*I just felt good about having effective treatment without taking medication, that was the biggest thing for me.*” (Emily, p. 9, lines 10-11)

This excerpt shows how achieving pain relief outside of using pharmaceuticals resulted in Emily feeling “good” that she had been relieved of her pain without using medication that would be exposed to her unborn child. For many women, the safety of osteopathic treatment during pregnancy had a strong relationship with trust, as those who had established a trusting
relationship with their osteopath felt that osteopathic care was a safe option for pain relief prenatally.

**Trust**

Trust can be defined as “the optimistic acceptance of a vulnerable situation in which the truster believes the trustee will care for the truster's interests” (Hall et al., 2001, p. 615). Two aspects of trust have been identified in healthcare: interpersonal trust and social trust. Interpersonal trust relates to the trust between the patient and the practitioner, whereas social trust refers to trust in an institution and could be related to osteopathy as a profession in this setting (Egede & Ellis, 2008).

A trusting relationship between the woman and her osteopath was found to be important in providing security during osteopathic treatment during pregnancy. Shaw, Ibrahim, Reid, Ussher and Rowlands (2009) identified the importance of trust in a health care setting. Whilst this study focused on patients requiring cardiovascular care, it is presumed their findings would be of relevance to any patient requiring health care and therefore to women during pregnancy also.

Mogren, Winkvist and Dahlgren (2010) investigated midwife’s views towards pelvic pain during pregnancy. It was found that women who described vague symptoms were less likely to be trusted by their midwives and it was acknowledged that some women have a fear of not being believed. This shows the importance of trust between both the clinician and the patient and how a reluctance to trust on either part can affect this therapeutic relationship.

It is interesting to note that despite the women in this study not having a solid knowledge base about the scope of osteopathic practice all women appeared to have trusting relationships with their osteopaths. Whilst a better knowledge base may influence public perception and therefore increase trust around osteopathy as a healthcare modality (social trust), the results of this study suggest that knowledge is not paramount in the development of a trusting relationship. The following section examines the final aspects about osteopathy during pregnancy that were identified on reflection of the experience.
**Making Sense of the Experience**

Due to the concomitant nature of this final theme, the participants had already undergone a level of self-reflection. Consequently, this influenced the nature of the subthemes within ‘Making sense of the experience’.

**Previous Manual Therapy Experience**

The women’s manual therapy experiences prior to osteopathy during pregnancy had an impact on how they viewed osteopathy as a profession and as a treatment modality during pregnancy. Most of the participants had experienced osteopathic care from the same osteopath they used during pregnancy, prior to becoming pregnant. The exceptions to this were Ella, Amy and Emily. Ella had never experienced osteopathy prior to looking for an osteopath to treat her during her pregnancy, whereas Amy and Emily both came across osteopathy during earlier pregnancies and continued to see their osteopath in between and during subsequent pregnancies.

All participants had experienced another manual therapy modality prior to osteopathy. These modalities included physiotherapy, chiropractic and massage therapy. When comparing osteopathy to these other modalities, all participants reported osteopathy was more affective that the others and was less uncomfortable or painful. The way in which participants were recruited for this study and the influence this may have has been considered when evaluating this finding. As all participants were recruited through their osteopaths it is assumed they had a good relationship with their osteopath and therefore may have had some bias in the information they gave. This aspect will be further discussed in the limitations section.

**Positive Results**

All participants reported that osteopathy during pregnancy had positive results on their levels of pain and discomfort and increased their ability to function. These positive results included a decrease in the severity of pregnancy complaints, increasing their quality of life. The positive results achieved during pregnancy were found to be similar to those achieved when not pregnant. As highlighted in the results section, many participants reported that with osteopathy the results might take a few days to show up. This concept of the benefits of osteopathic
treatment taking time to arise is not an uncommon idea, with many osteopaths routinely informing their patients that this may occur. I was unable to find any literature on this concept.

OSTEOPATHIC TREATMENT DURING PREGNANCY – NO DIFFERENT FROM OSTEOPATHIC TREATMENT WHEN NOT PREGNANT

All participants felt that osteopathy during pregnancy was no different to osteopathy at any other stage of life. This idea did not appear to be influenced by the ‘style’ of osteopathy experienced, with participants who experienced structural osteopathy and those who experienced cranial osteopathy both having this attitude. An idea that arose was that the practitioner was pivotal in their experience of osteopathic care “it was still with the same person so…” (Amy, p. 1, line 8) It is possible that this may offer a part explanation as to why their experience was no different, as the majority of participants’ experienced osteopathic treatment from the same practitioner both when they were pregnant and when they were not. The idea that participants in this study perceived osteopathy during pregnancy as being no different to osteopathy when not pregnant is interesting as anecdotal evidence suggests osteopaths approach the treatment of pregnant patients differently to patients who are not. Sandler acknowledges that the diagnostic and treatment approach to pregnant women experiencing LBP is different to that of non-pregnant individuals experiencing LBP. Furthermore, he identifies differences in treatment approach in that the patient cannot be treated prone and that “manual techniques are better than mechanical ones because the palpatory response to the changing tissues is very important in this group of patients” (Sandler, 1996, p. 178).

Although the women noted that their osteopath had them in different positions during their pregnancy and was reported to be more “mindful” (Nicola, p. 4, line 35) of their condition, this was not attributed to impacting on their experience of osteopathy during pregnancy. It would be interesting to identify factors that influence the experience of healthcare. What factors in the healthcare interaction can change and leave the interpretation of an experience the same? Is it dependent on the variables such as techniques used, positions or practitioner? Or is it dependent on the number of variables changed? If so, how many can change before the experience is deemed different?

Emily did not consider osteopathy during pregnancy to be any different as the results she had from osteopathy during pregnancy met her treatment outcome expectations. “It didn’t seem to inhibit my treatment at all being pregnant” (p. 6, lines 3-4). Emily’s focus is on the effect pregnancy
could have on her treatment outcomes, a different viewpoint to Nicola who’s focus was on the affect treatment could have on her pregnancy.

The following section examines issues that arose throughout the process of analysis and reflection. These issues were either identified during the interview or during reflection immediately after, or throughout the process of thematic analysis.

**OTHER ISSUES FOR DISCUSSION**

The following section examines issues that arose throughout the interview and thematic analysis processes, but which were not adequate enough to be considered as themes.

**INFLUENCE ON CHILDBIRTH EXPERIENCE**

One of the aims of my study was to investigate if there was any relationship between osteopathy during pregnancy and the childbirth experience. As this was an exploratory study it was hoped that the attitudes of women who had experienced this first hand would help to uncover if this idea had any substance. The attitudes around this idea were varied and as ‘childbirth experience’ is an open term the participants all had their own interpretation of this. The type of osteopathic treatment experienced (cranial or structural) did not appear to be an influencing factor in the women’s attitudes to this idea. Table 2 below includes the attitudes of each participant with dialogue extracts illustrate these views.
Table 2

**Attitudes of participants regarding any potential relationship between osteopathy during pregnancy and their childbirth experience**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Treatment approach experienced</th>
<th>Attitude</th>
<th>Dialogue excerpts illustrating each participant's attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ella</td>
<td>Cranial</td>
<td>Yes</td>
<td>“If there’s not pain in your body then that’s a great way to start a labour. It was just a general sense of wellbeing and calm and I was just looking forward to the process and positive about the process. I’m someone who is a big advocate for natural birth and really passionate about birth anyway, so it was always going to feel good, but I think the fear and the unsettled emotions can play up in labour. I think that the care that I received helped to sort of calm that down and make sure that everything internally was working well enough for me to do what I had to do.” (Ella, p. 7, lines 23-29)</td>
</tr>
<tr>
<td>Jane</td>
<td>Structural</td>
<td>No - caesarean delivery</td>
<td>“No, I wouldn’t say that. No. Maybe if I had have had a vaginal birth. I had a caesarean so it [osteopathic treatment] didn’t really [influence childbirth experience]... I don’t think it did anyway.” (Jane, p. 3, lines 28-29)</td>
</tr>
<tr>
<td>Emily</td>
<td>Structural</td>
<td>No</td>
<td>“Because I’ve now had five, I don’t think so actually, because they’ve all been different. Some of them I’ve had very long labours for and they’re ones where I’ve see [osteopath] and others have been shorter. So I couldn’t say that my labours were, because they haven’t necessarily followed a regular pattern.” (Emily, p. 7, lines 1-4)</td>
</tr>
<tr>
<td>Amy</td>
<td>Cranial</td>
<td>Unsure</td>
<td>“You don’t really know what it would have been like if you hadn’t.” (Amy, p. 4, line 18)</td>
</tr>
<tr>
<td>Lucy</td>
<td>Cranial</td>
<td>No - caesarean delivery but feels it helped with healing afterwards</td>
<td>“Because with a Caesar, it’s not part of the natural flow of a birth experience. So in that respect I think for the afterwards, for the healing after I think it plays a part. But for the actual part of it it’s just a medical intervention and a mini operation really. It’s not like having a natural birth or having a labour and having an epidural or, with all those, with the drugs and things like that. But definitely I think it’s helped in the aftercare of that.” (Lucy, p. 13, lines 16-21)</td>
</tr>
</tbody>
</table>
The women who felt that osteopathy did have an influence on their childbirth experience discussed how it reassured them that they were physically prepared for childbirth. Both Ella and Nicola felt that this reassurance allowed them to mentally concentrate on the delivery. Of the three women who felt that osteopathy did not have any influence on their childbirth experience, two of them had caesarean deliveries. Perhaps those who felt osteopathy affected their physical preparation were referring to pelvic biomechanics, something that would not be affected as greatly in a caesarean delivery. Emily felt that osteopathy had no influence on the duration of her labours although further questioning was not undertaken to see if she felt osteopathy had any influence on any other factors that may have played a role in her perception of birth experience. Amy gave no direct answer to this question although her response: “You don’t really know what it would have been like if you hadn’t” (Amy, p. 4, line 18) reminds us that as childbirth is influenced by so many factors, it is hard to make comparisons, as no two deliveries will be the same.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Treatment approach experienced</th>
<th>Attitude</th>
<th>Dialogue excerpts illustrating each participant’s attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicola</td>
<td>Both Cranial and Structural</td>
<td>Yes</td>
<td>“My body was fatigued as it was and I think if I hadn’t had the osteopathy I would have been a lot more physically drained and less able to concentrate on the delivery, so I think it is important. Definitely. Definitely. Your body’s got to be functioning on all levels as well as it possibly can when you are about to have a baby, otherwise you’re already a few steps behind.” (Nicola, p. 12, lines 15-18)</td>
</tr>
<tr>
<td>Lauren</td>
<td>Structural</td>
<td>Yes</td>
<td>“I think it made it easier for her to come out the wrong way (laughs).” (Lauren, p. 12, line 1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“I was going into the birth and I knew that everything was kind of in alignment so everything was you know, optimum for [child] to come out.” (Lauren, p. 8, line 25; p. 9, line 2)</td>
</tr>
</tbody>
</table>

The role of the obstetrician arose throughout the interview with some of the women who had chosen one as their lead maternity carer (LMC). Despite the interviews being conducted individually, common expressions were used to describe the role the obstetrician played.
throughout their pregnancy and labour. The below quotations from Lauren and Lucy elicit how they felt the health of their baby was of primary concern to the obstetrician, followed by their own health:

“He was always more about the baby than about, I mean that’s not true but you know, he’s more about the safely of the baby I guess.” (Lauren, p. 12, lines 13-14)

“Other than directly, I mean, I had an obstetrician, for the baby and also the factors of my age, and an IVF baby, I didn’t want to take any chances.” (Lucy, p. 3, line 13)

The above statement from Lucy also suggests her attitude towards obstetricians are that they are the safest option. Despite this, she also acknowledges that they were not able to offer her any help for common pregnancy complaints, leaving a ‘gap’ in the healthcare of pregnant women.

Lucy: “Certainly for the day to day things, the pains that I were getting, I was telling him [obstetrician] about that and he would just say, ‘Oh, that’s completely normal.’ There was no help given. You know what I mean? I mean, what can they do?”
Researcher: “So you were just reassured that that was common?”
Lucy: “That that was common, that what I was feeling was not unusual and then just left it at that and I went to see an osteopath.”
Researcher: “Did your obstetrician give you any advice at all, about that?”
Lucy: “No, no. They were just like, ‘Oh, that’s normal.’ The other thing I had was like heart burn and he said just to take like Gaviscon, and again that was another common symptom of the baby pushing high up, into the diaphragm. What else was there? Yea, and the swelling and puffiness as well, and again he said another common symptom. Some women get it, some women don’t.” (p. 3, lines 18-29)

The above comments from Lucy express her attitude that the role of the obstetrician does not include dealing with common pregnancy complaints, despite the majority of women experiencing these discomforts to some degree throughout their pregnancy.

Lauren’s experience with her obstetrician was somewhat more supportive. Whilst he could not directly help her with the common pregnancy complaints she was experiencing, he put her in touch with health professionals that could:

“When my pelvis initially went I rung my obstetrician to say ‘what’s happening?’ and he was like this has probably happened if you ring our front desk you can [get a contact number] so I rang the front desk and they gave me the name of the physiotherapist and I thought oh, ok, so it’s that type of injury, I don’t need to go and see a physiotherapist and then I went to an osteopath instead.” (Lauren, p. 12, lines 3-10)

It appears that Lauren appreciated the support from her obstetrician despite his inability to be of direct help. This gave her information on what she was experiencing and allowed her the opportunity to make her own choice on how she wanted this treated. However the indirect
nature with which she received this information supports the idea that there is a lack of knowledge by other healthcare providers regarding what osteopathy is and how it can be of assistance throughout pregnancy.

The following section looks at another aspect of osteopathic care that may be of help to some women and their obstetricians and midwives.

**OSTEOPATHY TO INDUCE LABOUR**

The idea that osteopathy could be used to help induce labour is not an unusual concept to many osteopaths as pregnancy is considered a contra-indication for many techniques for fear that it may stimulate labour early in the pregnancy. The quotation below although vague suggests that in certain situations such as Nicola’s encouraging labour may be beneficial. Nicola was advised by her obstetrician that he would recommend Nicola be artificially induced if she went over her due date, due to her advanced maternal age. This was against Nicola’s wishes due to the experiences she had heard of other women who had undergone artificial induction, so she attempted to induce her labour naturally using various techniques, the help of her osteopath being one of them:

> “Then towards the end probably about a week or two before I had [child’s name], he was trying to do some cranial work to try and help bring things on and see where I might be because it was probably around my due date.” [Nicola, p. 1, lines 29-31]

Despite the idea of certain osteopathic techniques being able to induce labour, it is not known whether many osteopaths perform these on overdue women in order to stimulate labour. The next section looks at the use of osteopathy in routine prenatal care.

**OSTEOPATHY AS PART OF PRENATAL ROUTINE**

The women in this study who had used osteopathy during previous pregnancies continued to use osteopathy for all subsequent pregnancies. Those who had been interviewed following the birth of their first child also held the attitude that they would enlist the help of an osteopath again for any further pregnancies. This brings about the question: once they had experienced osteopathy during pregnancy, did this become part of their prenatal routine? Perhaps these women had overcome any accessibility issues and had experienced an increase in their quality
of life alongside the security osteopathy can offer, resulting in the attitude that osteopathic care during pregnancy is a “no brainer” (Lucy, p. 3, line 8).

The next chapter evaluates the conclusions drawn from this study.
CHAPTER SEVEN: CONCLUSIONS
This chapter encompasses the attributes and limitations of the project and proposes topics for future study. The chapter will then conclude with the relevance of key findings for the osteopathic profession and other healthcare professionals who care for women during pregnancy.

**Attributes and Limitations of the Study**

This research provides a rich description of the attitudes to and experiences of osteopathic care during pregnancy. Whilst the factors identified are associated with an osteopathic setting, many aspects are applicable to wider prenatal care, both routine and supplementary. Literature around the topic of osteopathy during pregnancy is relatively scarce, despite anecdotal evidence suggesting that a large number of osteopaths treat women throughout pregnancy. Furthermore, no qualitative studies were identified, and as such, previous knowledge about women’s attitudes or experiences toward osteopathy during pregnancy was limited. Qualitative studies are especially important in healthcare as they allow healthcare providers insight into the human experience. This project adds value to the current osteopathic literature.

The participants in this study were a mix of first time mothers and those who had up to five children. Additionally, there was an even spread of exposure to different osteopathic styles. Furthermore, some women in the study specifically sought osteopathic treatment for pregnancy, whilst others returned to their osteopath for pregnancy related musculoskeletal complaints. This variation in levels of exposure to osteopathy, pregnancy and osteopathic care during pregnancy was not intentional when sampling occurred, however it does add to the strengths of the study in that even though the sample size is small, participants had a large variety of factors that may have influenced their attitudes to and experience of osteopathy during pregnancy. However, due to this small sample size (n=7), further studies into women’s attitudes to and experiences of osteopathic care during pregnancy would be beneficial in order to allow the themes identified to emerge in greater detail and establish if any further themes are apparent. Additional to this is that two osteopaths whose help was enlisted during the recruitment phase of the project each recruited two participants. This results in the women’s narratives only involving five different osteopaths collectively.

While the sampling method for this study is valid, it may have led to a biased population of participants. As all participants were recruited by their osteopath, it is possible that the osteopaths only approached those with whom they felt they had a good relationship with. Furthermore, the women who participated therefore may have been biased in that they were
more likely to have had positive experiences of osteopathy during pregnancy. This was highlighted within this study when one of the participants said “[Osteopath] asked me if I would mind being interviewed by you and I’m quite happy to do that, as I said, I really like her and if it helps what you guys are doing that’s fantastic” (Jane, p. 7, lines 16-17). However, not all of the themes in this study were cohesive in showing a positive experience of osteopathy, for example, ‘Accessibility’.

**Future Research**

As this was an exploratory research project numerous areas for future research were identified. One of the subthemes that arose throughout the process of data analysis was that osteopathic treatment during pregnancy was no different than at any other stage of life. This was consistent with all participants despite the fact that they reported differences in the way their osteopath utilised techniques and approached their treatments during pregnancy. It would be of benefit to the osteopathic profession to investigate factors that influence patient’s experience of osteopathic care and if there is a relationship between the variables, or number of, which can be altered before the experience is perceived as different by the participant.

One participant expressed that she was having osteopathic treatment in order for her growing baby to be in the best environment it could be. Whilst this did not arise with any other participants, research into why women seek osteopathy during pregnancy (for their baby, for themselves, or both?) would be of use to the osteopathic profession.

Investigation into the way osteopaths approach the treatment of women during pregnancy and their beliefs around what can be influenced with osteopathic techniques would be of interest. This question would lend itself well to a two-part study, with the first phase identifying common beliefs, attitudes and experiences of osteopaths, and the second phase gathering the incidence of these finding within the osteopathic profession. From the lived experience of the participants in this study it can be assumed that to some extent many of the osteopaths believed that osteopathic care could be of benefit for common pregnancy complaints, preventative and wellness care, labour preparation and facilitating natural induction of labour.

The knowledge and perception of the osteopathic profession by other healthcare providers and the general public arose within the theme of accessibility within this study. Anecdotal evidence within the osteopathic profession suggests that osteopaths are aware of a lack of knowledge by the general public and other health professionals regarding the profession and what it can offer.
However, it would be of interest to investigate the attitudes, experiences and beliefs of osteopaths with regard to how other healthcare providers view the profession.

**Implications for Health Practitioners**

Within the themes identified in this study are implications for all healthcare providers. Although the following are focused on the osteopathic profession, many of these findings are applicable to any health care providers who treat women throughout their pregnancy.

The accessibility of osteopathic care during pregnancy was identified as an issue for women during pregnancy. The lack of knowledge of the general public and other healthcare providers alongside the costs associated with private healthcare were barriers that the participants of this study managed to overcome. Anecdotal evidence amongst the osteopathic profession suggests that there is an awareness of the lack of knowledge around osteopathy as a profession. The findings of this study further support anecdotal evidence that this is an area that needs addressing by the profession, not only for women seeking osteopathic care during pregnancy and their associated healthcare providers, but for the general public. Secondly, the change in financial situation that many young families find themselves in when one parent takes parental leave comes at a time where there are additional healthcare costs. Offering stratified pricing for low income families may allow families to access osteopathic care both preventatively and as soon as required, instead of waiting until functionality is at a minimum or missing out on this healthcare option all together.

The wider effect of common pregnancy complaints on women's quality of life was also established. Women are in need of a wellness care approach that offers preventative care alongside treatment of current complaints in order to maintain or improve functionality and decrease stress, thus, impacting on women's quality of life. Furthermore, common pregnancy complaints need not be 'one's lot' during pregnancy and healthcare providers need to be understanding of the wider effects these complaints can have on a women, her family and her work-place.

The large impact reassurance can have on women who experience uncertainty and or fear during pregnancy requires further acknowledgement. It is evident from the data that this was something many of the participants experienced, but many of the women did not always get an opportunity to express these concerns and when they did, were thankful when reassurance was received. Reassurance provided security about the remainder of the pregnancy and childbirth.
process and gave the women a greater sense of control. Furthermore, many women felt reassured by receiving additional prenatal care for them and their baby.

Lastly, the affect of previous manual therapy experiences on patient's attitudes to and experiences of osteopathic treatment during pregnancy should not be overlooked. Evidence from analysis of the data suggests that women who had positive previous experiences had few concerns about osteopathic treatment during pregnancy and did not perceive the experience to be any different, compared with those who had had a negative experience.

**Concluding Statement**

Osteopathy during pregnancy was perceived as an effective treatment in reducing or ameliorating pregnancy complaints and was not identified as being any different to osteopathic care when not pregnant. When combined with a preventative approach, women reported that osteopathic care decreased their stress levels, increasing their quality of life. Furthermore, this additional prenatal care offered women security during a period of change and uncertainty within their lives. In order to enhance the prenatal care options available to New Zealand women, the affordability of such care for low income families alongside a greater knowledge about the osteopathic profession and what it has to offer women during pregnancy needs addressing.


APPENDICES
APPENDIX A: UREC CONSENT FORM

Anna Kurth
11A Wates Road
Spendingham
Auckland

26 August 2010

Dear Anna

Your file number for this application: 2010-1103

Title: The attitudes to end experiences of women to osteopathic treatment during pregnancy

Your application for ethics approval has been reviewed by the Unitec Research Ethics Committee (UREC) and has been approved for the following period:
Start date: 25 August 2010
Finish date: 24 August 2011

Please note that:
1. the above dates must be referred to on the information AND consent forms given to all participants
2. you must inform UREC, in advance, of any ethically-relevant deviation in the project. This may require additional approval.

You may now commence your research according to the protocol approved by UREC. We wish you every success with your project.

Yours sincerely,

[Signature]

Lyndon Walker
Deputy Chair, UREC

CC: Elizabeth Niven
Cynthia Almeida
Appendix B: Information Sheet

INFORMATION SHEET

The attitudes to and experiences of osteopathic treatment during pregnancy

About this research:
You are invited to take part in a study which explores the attitudes to and experiences of women to osteopathic treatment during pregnancy. We are interested in researching this topic from the perspective of women who have experienced osteopathic treatment during their pregnancy as information regarding this will allow us to gain an understanding of the role osteopathic care played in their pregnancy and birth experience.

If you have experienced osteopathic treatment at least three times during your pregnancy and have given birth to your child within the last year we would like your participation. Your involvement in this project will help us understand the role of osteopathic care for women during pregnancy and any influence this may have on childbirth.

The knowledge gained from this project will help health care providers to further support women during this stage of their lives.

The Researcher:
Anna Kurth, Masters of Osteopathy Student, Unitec.
This project is being supervised by Dr. Elizabeth Niven and Dr. Dianne Roy.

Taking part in the project:
This project will investigate your attitudes to and experience of osteopathy during pregnancy and any relationships this may have with your quality of life during pregnancy and your child birth experience. This will be done through an in-depth interview that will take at most an hour and a half. You will be interviewed by Anna in your home or other place of your choice.

Information:
During the interview open questions will be asked about your experience of osteopathic treatment during your pregnancy. All information conveyed during the interview will be confidential and anonymous. A copy of the transcript will be posted to you as soon as possible after the interview, of which you are able to comment on. You are able to withdraw from the study up to two weeks following the interview.

Any concerns:
If you have any further questions or concerns please feel free to contact me directly on 021720099 or at anna.kurth@gmail.com. If you wish you may also contact my principal supervisor Dr. Elizabeth Niven on (09) 8154321 ext8320.

Thank you for reading this information sheet, please keep it for your records.
Approval for this study has been granted by the Unitec Research Ethics Committee for August 2010 - August 2011. Application number 2010-1108.
APPENDIX C: CONSENT FORM

PARTICIPANT CONSENT FORM

The attitudes to and experiences of osteopathic treatment during pregnancy

This research project will investigate the attitudes to and experiences of osteopathic treatment during pregnancy. The research is being conducted by Anna Kurth a Masters of Osteopathy student at Unitec and is supervised by Dr Elizabeth Niven and Dr Dianne Roy.

Name of Participant: ____________________________________________

I have seen the information sheet for people taking part in the study into women’s experiences of and attitudes to osteopathic treatment during their pregnancy. I have had the opportunity to read the information sheet and to discuss the project with Anna and I am satisfied with the explanations I have been given. I understand that I may seek further information if I wish. I understand that taking part in this project is my choice and that I may withdraw from the project at any time up until 2 weeks after the interview is completed.

I understand that I can withdraw from the interview at any time and can decline to answer any particular questions in the study.

I understand that participation in this study is confidential and that no material that could identify me or my osteopath will be used in any reports on this study.

I have had enough time to consider whether I want to take part.

I know who to contact if I have any questions or concerns about the study.

The principal researcher for the study into attitudes and experiences of osteopathic treatment during pregnancy is Anna Kurth who is contactable by phone on 021720099, or by email, anna.kurth@gmail.com.

Participant Signature: ___________________________ Date: __________ 2010

Project explained by: _____________________________

Signature: _____________________________ Date: __________ 2010

Thank you for participating in this research project.

Please keep a copy for your records.

Approval for this study has been granted by the Unitec Research Ethics Committee for August 2010 - August 2011. Application number 2010-1108.
APPENDIX D: INTERVIEW FORMAT

INTERVIEW FORMAT

The attitudes to and experiences of osteopathic treatment during pregnancy

- Reaffirm the participant is happy to partake in the study and proceed with the interview process.
- Answer any additional questions following explanation of the information sheet and get consent form signed.
- Relay the purpose of the research to the participant and obtain demographic data (see below).
- Explain that I may take notes during the interview.

This is an interview on (date) at (time) between Anna and (participant). The pseudonym chosen is ...................................................

Demographic Data:

- Age of participant
- The number of children participant has
- Whether or not the participant has had osteopathic treatment for other pregnancies (if applicable)
- The number of times they received osteopathic treatment during their pregnancy
- Record when osteopathic treatment occurred in relation to gestation period

Participant narrative prompts:

- Why did you choose osteopathic treatment during your pregnancy?
  - Why osteopathy?
  - How did you choose that osteopath?
  - Were there any other side-effects or complaints associated with pregnancy additional to the issue that took you to the osteopath which were treated by the osteopath?)
- Tell me about your experience of osteopathic treatment during your pregnancy (what was an example of… etc., etc.)
- Do you believe the treatment had an effect on your pregnancy? (why/why not)
- Do you believe the treatment had an effect on your birth experience? (why/why not)
- Is there anything you expected me to ask you that we haven’t discussed?
- An open space for discussion of further issues which are important to them.
- Re-affirm consent and explain that a copy of the transcript will be sent to them for them to comment on and return if they choose.
APPENDIX E: NON-DISCLOSURE FORM

The attitudes to and experiences of women to osteopathic treatment during pregnancy

NON-DISCLOSURE OF INFORMATION

Transcribing Typist

I ________________________________ agree not to disclose the name of, or any information that would lead to the identification of the participants in the research study being undertaken by Anna Kurth, Masters of Osteopathy Student at Unitec, New Zealand.

The audiotapes, transcription hard copies, and computer files will not be made available to anyone other than the researcher and will be kept securely while in my possession.

I will not retain any copies of the audiotapes, computer files, or transcriptions.

Signed: ____________________________

Name: ______________________________

Date: ________________________________
We are looking for participants for a study on osteopathic treatment during pregnancy.

**Do you fit the following criteria?**

- Have had osteopathic treatment three or more times during your pregnancy.
- Have given birth to your child within the last year
- Would like to share your experience of osteopathic treatment during your pregnancy and any influence this may have had on your childbirth experience.

If you are interested in participating please contact the researcher

**Anna Kurth**
Ph. 021720099
anna.kurth@gmail.com

Approval for this study has been granted by the Unitec Research Ethics Committee for August 2010 - August 2011. Application number 2010-1108