Exploring
Childbearing Women's Perception
of the
Role of a Midwife

Leen Ooi BOON
University of Western Sydney (Rydalmere)
A thesis submitted in fulfillment of the Master of Nursing
(Honours) degree, 2002
I certify that this thesis has not been submitted for a higher degree to any other University or Institution.

The source of the information herein is original and is solely the work of the author, except as indicated in the thesis.

(Signature)
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter Three: Literature Review</td>
<td>41</td>
</tr>
<tr>
<td>3.1. Introduction</td>
<td>41</td>
</tr>
<tr>
<td>3.2. Women’s perceptions of the roles of maternity carers</td>
<td>42</td>
</tr>
<tr>
<td>3.3. Women’s expectations of the midwife</td>
<td>46</td>
</tr>
<tr>
<td>3.4. Midwives’ perceptions of the role and practise of the nurse-midwife</td>
<td>47</td>
</tr>
<tr>
<td>3.5. Multidisciplinary team’s perceptions of the role of a midwife</td>
<td>49</td>
</tr>
<tr>
<td>3.6. The relationship between the midwife and the clients</td>
<td>51</td>
</tr>
<tr>
<td>3.7. Women’s belief in a midwife’s knowledge</td>
<td>53</td>
</tr>
<tr>
<td>3.8. Social changes and the impact on the midwife’s role</td>
<td>57</td>
</tr>
<tr>
<td>3.9. Choice of midwife led maternity care</td>
<td>59</td>
</tr>
<tr>
<td>3.10. Midwife, part of the maternity health care team</td>
<td>61</td>
</tr>
<tr>
<td>3.11. Midwife, Nurse and Traditional Birth Attendants</td>
<td>66</td>
</tr>
<tr>
<td>3.12. Conclusion</td>
<td>69</td>
</tr>
<tr>
<td>Chapter Four: Western Sydney Health Area</td>
<td>71</td>
</tr>
<tr>
<td>4.1. Introduction</td>
<td>71</td>
</tr>
<tr>
<td>4.2. Brief description of Western Sydney Health Area (WSHA)</td>
<td>72</td>
</tr>
<tr>
<td>4.2.1. Demographic characteristics</td>
<td>74</td>
</tr>
<tr>
<td>4.2.2. Ethnicity</td>
<td>75</td>
</tr>
<tr>
<td>4.2.3. Socio-economic characteristics</td>
<td>76</td>
</tr>
<tr>
<td>4.3. Westmead Hospital</td>
<td>78</td>
</tr>
<tr>
<td>4.3.1. The structure of the Obstetric and Gynaecology Department at Westmead Hospital</td>
<td>79</td>
</tr>
<tr>
<td>4.4. Models of maternity care at Westmead Hospital</td>
<td>82</td>
</tr>
<tr>
<td>4.4.1. Midwife’s Clinic</td>
<td>83</td>
</tr>
<tr>
<td>4.4.2. Team Midwifery Program (TMP)</td>
<td>84</td>
</tr>
<tr>
<td>4.4.3. General Practitioner (GP) shared care</td>
<td>86</td>
</tr>
</tbody>
</table>
4.4.4. Obstetric consultant care ......................................................... 86
4.4.5. Private care by an obstetric consultant ................................. 87

4.5. Role of the midwife at Westmead Hospital ................................. 87
  4.5.1 Antenatal clinic ........................................................................ 89
  4.5.2. Antenatal Ward ....................................................................... 90
  4.5.3. Delivery Suite ......................................................................... 91
  4.5.4 Postnatal Ward .......................................................................... 93
  4.5.5. Community Midwife ................................................................. 94
  4.5.6. Summary of midwifery care at Westmead Hospital ............... 95

4.6. Data collection of live and still births in NSW ............................. 96
  4.6.1. NSW Midwives Data Collection ............................................... 96
  4.6.2. Westmead Hospital Clinical Information System .................... 96

4.7. Summary ....................................................................................... 98

4.8. Conclusion .................................................................................... 99

Chapter Five: Methodology ................................................................ 101

5.1. Introduction .................................................................................. 101

5.2. Method of data collection .............................................................. 102
  5.2.1. Survey .................................................................................... 102
  5.2.2. Survey technique .................................................................... 103
  5.2.3. Questionnaire ......................................................................... 104

5.3. Consultation with a statistician ..................................................... 108

5.4. Translation of prompt card ......................................................... 109

5.5. Sample ......................................................................................... 110
  5.5.1. Sample size ........................................................................... 111

5.6. Venue ......................................................................................... 112

5.7. Recruitment ............................................................................... 113
7.3. Limitations of the study ................................................................. 197
7.4. Conclusion.................................................................................. 198
7.5. Recommendations .................................................................. 202

APPENDIX 1. Checklist used to monitor antenatal advice given at each antenatal visit ... 205
APPENDIX 2. 'Midwives Data Collection' form .............................................. 206
APPENDIX 3. Prompt card ....................................................................... 207
APPENDIX 4. Semi structured questionnaire .................................................. 208
APPENDIX 6. 'Selection Criteria Checklist & Registration' form ..................... 210
APPENDIX 7. 'Consent to participate in research' form .................................. 211
APPENDIX 8. 'Patient's information' form ..................................................... 212
APPENDIX 9. Permission to replicate study .................................................. 214
GLOSSARY ......................................................................................... 224
TABLES

Table 1 Number of childbearing age females in Local Government Areas of Western Sydney .......... 75
Table 2 The unstructured and semi structured part of the semi structured questionnaire .......... 104
Table 3 Details of sample recruitment .............................................................................. 122
Table 4 Hospital classification of participants ................................................................. 123
Table 5 Parity of the participants ...................................................................................... 123
Table 6 The number of participants who worked since leaving school ......................... 129
Table 7 The type of interpreter service required by the participants ................................ 136
Table 8 Number and percentage of participants who agreed that a midwife is trained to assist the pregnant women's pregnancy and childbirth (before, at and after birth) together with the 95% CI for the percentage ........................................................................................................ 140
Table 9 Number and percentage of participants who agreed that a midwife is NOT trained to do the specific tasks (before, at and after delivery) together with the 95% CI for the percentages .................................................. 144
Table 10 Summary of themes identified from phrases or views and the aspects of midwifery care connected to these themes (question one) ........................................................................ 150
Table 11 Thematic analysis, major and sub major categories (question one) ..................... 152
Table 12 Summary of themes, major and sub categories identified by thematic analysis (question one) .................................................................................................................. 153
Table 13 Themes (eight) identified from phrases and views expressed by the participants, and aspects of midwifery care relating to the themes (question two) .................................................. 155
Table 14 Major and sub major categories identified from thematic analysis (question two) .......... 156
Table 15 Summary of themes, major and sub categories from thematic analysis (question two) .... 157
Table 16 Responses of the managers to question two (trained to do) and question three (not qualified to do) from prompt card .................................................................................... 161
Table 17 Demographic details of the oldest and youngest group ...................................... 164
Table 18 Responses of the oldest and youngest groups to question two (trained to do) and question three (not qualified to do) in the prompt card ........................................................................ 165
Table 19 Total births at Westmead Hospital in 1998 and 1999 ........................................ 177
Table 20 Normal vaginal deliveries by accoucher in 1998 and 1999 ................................... 177
Table 21 Comparison of results between Leach et al (1998) and this study (2001) ............... 193
Table 22 Comparison of results between Luanagh (1995) and this study (2001).........................195
FIGURES

Figure 1 Western Suburbs ................................................................. 72
Figure 2 New South Wales Area Health Services .................................... 74
Figure 3 Hospitals ........................................................................ 77
Figure 4 Structure of the Obstetric and Gynaecology Department at Westmead Hospital .................................. 79
Figure 5 Models of maternity care ...................................................... 82
Figure 6 Formula for calculating the lower limits of the 95% confidence interval (CI) of each percentage ................................................................. 121
Figure 7 Formula for calculating the upper limit of the 95% confidence interval (CI) of each percentage ................................................................. 121
CHARTS

Chart 1 Age Groups of the Participants ................................................................. 124
Chart 2 Marital Status of the Participants ............................................................ 125
Chart 3 Accomodation Status of the Participants .................................................. 126
Chart 4 Telephone Access of the Participants ...................................................... 127
Chart 5 Employment status of the participants .................................................... 128
Chart 6 Age when the participants left school or full time education .................... 130
Chart 7 Job or occupation .................................................................................... 132
Chart 8 Participants’ Country of Birth ................................................................. 133
Chart 9 Participants’ Length of stay in Australia at the time of recruitment for this survey ............. 134
Chart 10 First Languages spoken by the Participants ........................................... 135
Chart 11 Specific tasks that a midwife is trained to help you with before birth (question two) .......... 138
Chart 12 Specific tasks that a midwife is trained to help you with at birth (question two) ............ 139
Chart 13 Specific tasks that a midwife is NOT trained to do before birth (question three) ............ 142
Chart 14 Specific tasks that a midwife is NOT trained to do at birth (question three) .............. 143
ABSTRACT

Do childbearing women in Australia perceive the role of a midwife differently from the way it is perceived by women in the United Kingdom? The childbearing women’s perception of the role of a midwife in Australia was explored using a descriptive study. The purpose of the study was to partially replicate a study by Leach et al (1998). This was conducted by recruiting a random sample of 108 primigravidas. Data was gathered by using a semi structured questionnaire.

The findings revealed that childbearing women in Australia overwhelmingly believed a midwife is specifically trained and qualified to deliver babies normally and to care for a woman in labour. However, in addition to the intrapartum role, women believed a midwife is trained to provide a comprehensive range of maternity related tasks like giving antenatal advice on pregnancy, childbirth, maternity benefits, maternity services, checking growth and position of baby, listening to baby’s heart rate, checking blood pressure, checking urine and giving postnatal care to mother and baby. The overriding themes which emerged from this study identified the midwife as a source of advice, information, support, education, guidance, specific midwifery knowledge and being a liaison person between the doctor and pregnant woman.

Limitation of the role of a midwife was believed to be due to the nursing based training of a midwife. The midwife is trained to identify obstetric or medical problems which will be appropriately referred to an obstetrician. A midwife
was perceived to be unqualified in performing 'medically oriented' tasks like prescribing medicine, performing caesareans, manipulative and breech deliveries and inserting an epidural block. In this study, a majority of childbearing women could identify the role of a midwife. However, there were women who lacked information and knowledge regarding the role of a midwife. This was attributed to lack of information regarding what a midwife is qualified to do. The findings from this study revealed that childbearing women in Australia, United Kingdom and Singapore have similar perceptions of the role of a midwife.

Following findings from this study, recommendations were made for further studies to investigate the reasons for a persistent lack of information regarding the role of a midwife and what sort of information is required by pregnant women.
DEDICATION

This project is dedicated to the fond memories of Mrs Lorraine Myers and Miss Bronwyn Thompson. Their premature demise was a great loss to the midwifery profession.
ACKNOWLEDGEMENTS

First and foremost, I would like to acknowledge and express thanks to my research supervisors, Dr. Debra Jackson, Dr. Julia Thompson and Miss Yoong Choong for their advice, support and encouragement. I would like to thank Professor Sue Nagy for her thoughtful comments on this thesis. I would especially like to express my sincere and heartfelt thanks to Dr. Julia Thompson, for her immeasurable and invaluable teaching, patience, encouragement, counsel, professional advice, critique and editorial support. Without her encouragement and persistence, I would have found it very difficult to complete this research and thesis.

I am grateful and would like to acknowledge my appreciation and thanks to the following people for their support and encouragement in this project.

The midwives in Clinic H at Westmead Hospital deserve special thanks. They are Julie Ackroyd, Kathy Briggs, Collette Compton, Rosie Gallagher, Leigh Hewitt, Louise Leggitt, Pamela Lesley and Megan Maguire. Their enthusiasm, encouragement and support had ensured the ‘field work’ in Clinic H to be one of the most interesting and enjoyable part of the research project.

The translators and interpreters from the Western Sydney Area Health Service, who had freely given of their time in translating the prompt card into the Arabic, Mandarin and Persian languages and interpreting for the participants.
Professor Brian Trudinger (Head of Obstetric and Gynaecology Department at Westmead Hospital), Dr Neil Athayde and Mrs Florence Ong (Nursing Unit Manager of Delivery Suite at Westmead Hospital) for their continual support in this project. Dr Michael Nicholl and Miss Sarah Everett for their assistance in extracting relevant obstetric data from the Westmead Hospital Clinical Information System. Dr Karen Byth for her advice in statistical analysis.

Last but not least, I would like to thank Miss Hely Lim for her indispensable support and encouragement.

Through it all, my family has been very supportive and encouraging.
Chapter One: Introduction, rationale and overview

1.1. Introduction

A midwife is a specifically trained health care professional who is knowledgeable and qualified to provide holistic maternity care to a pregnant woman requiring maternity services and care. The word “midwife” is derived from an Anglo Saxon word, comprised of ‘mid’ which means ‘to be’ and ‘wife’ which means ‘with woman in childbirth’ (Thompson, 1998). To be a midwife is thus to be with a woman at the time of her pregnancy and childbirth.

Midwifery is a profession dating back to ancient days. One of the early references to midwives was found in one of the first midwifery textbooks, the ancient Egyptian Ebers papyrus circa 1550 BC, detailing aspects of midwifery care (Kitzinger, 1991; Sledzik, 1991). Midwives were also mentioned in the Holy Bible, which provided an insight into the role of the midwife in ancient days.

In Genesis 35:17 (The Holy Bible, 1984), it was recorded that a midwife (‘to be with a woman’) attended and assisted in Rachael’s difficult birth of her son, Benjamin. Biblical accounts also included records of the birth of the twins Perez and Zerah. The midwife was with the woman in labour and attended the multiple birthing of the twins. It was recorded in Genesis 38:28, that the midwife ‘sequentialled’ the birth of the twins by tying a scarlet thread on the wrist of the first twin who stuck his hand out prior to his birth (The Holy Bible, 1984), therefore securing his birthright as the first born.
Pharaoh’s orders to kill all male infants born to Jewish women were ignored by the midwives (Shiphrah and Puah) who played a crucial part in preserving the life of Moses. They disobeyed Pharaoh’s command to kill all male Jewish infants at birth and in Exodus 1:15-21, explained that the “Hebrew women are not like Egyptian women; they are vigorous and give birth before the midwives arrive”.

The significant role of a midwife was also noted to have influenced the life of the great philosopher, Socrates, who apparently based some of his philosophical ideas on his mother’s work as a midwife. Parker and Gibbs (1998) wrote that “Socrates used midwifery as a metaphor to describe both the route toward true knowledge and the role of the philosopher in helping others reach it. He believed that both the philosopher and the midwife helped others through the travail of giving birth” (p. 146).

Throughout history, midwives have predominantly assisted women during childbirth. The skill and wisdom of childbirth attendance was handed down from one midwife or woman to another. At the time of her travail in birthing a child, a pregnant woman was often attended by a midwife or female attendant who had assisted in childbirth. Kitzinger (1991) explained that a midwife is therefore a wise woman who shares the birthing experience with a pregnant woman.

The fundamental role of a midwife is to provide holistic maternity care and services to the pregnant woman. This encompasses the antenatal care of the
pregnant woman through to the care of the woman and her infant in the postpartum period and providing support to her significant family members. The midwife and pregnant woman are therefore partners.

Midwifery is a relationship and partnership between the woman and the midwife. That is, the woman receives midwifery care from a midwife and the midwife assists the woman to achieve a positive pregnancy outcome. Within nursing in general, a nursing partnership allows the nurse and patient to work together to achieve optimal outcomes for the patient. According to Christensen (1990), a nursing partnership involves the nurse and patient working together, each making a contribution to the partnership and requiring the two of them to work together successfully. Similarly the midwife and the pregnant woman are required to participate and work together in achieving optimal maternity care. This is an underpinning philosophy of this thesis with regard to the relationship between the midwife and pregnant woman. It is a partnership between these two people.

Is this perception of a partnership with a midwife shared by the pregnant woman? This study will explore the childbearing women’s perception of the role of a midwife in Australia. A background to the study is presented in the next section.

1.2. Background to the study

A pregnant woman’s perception of the role of a midwife will impact on this relationship between the midwife and pregnant woman. A study by McCrea
(1993) revealed that the way a woman perceives a midwife would influence and affect the relationship negatively or positively. Furthermore, valuing the midwife's role is important in building a positive relationship between the woman and the midwife. A woman's lack of confidence in the role of a midwife and their abilities to provide competent maternity care can lead to a 'crisis of confidence' by the midwife and these reactions will cause the midwife to question their role and part in the care process and the value of their contributions (McCrea & Crute, 1991).

At the investigator's health establishment, regardless of their hospital classification (i.e. public or private), all pregnant women in labour are cared for by qualified midwives. The qualified midwives providing intrapartum care to privately insured women will contact the appropriate private obstetrician when the birth of the baby is deemed to be imminent. Normal vaginal deliveries, with the exception of instrumental deliveries of the non privately insured women, are delivered by qualified midwives or midwifery and medical students under the direct supervision of a qualified midwife. Similar practices are revealed in a study by Robinson (1985) which showed that 93% of the midwives surveyed indicated that normal labours were managed by midwives, unless there were problems.

The investigator on numerous occasions has encountered women in labour enquiring or requesting a doctor to be called to attend to the delivery of their babies. This occurred irrespective of the many hours a midwife spent with the women in labour; providing comfort, encouragement and support in their
labour and demonstrating confidence and competence in attending to the birthing process. This experience was shared by the investigator's midwifery colleagues working in the clinical area. This observation was similarly expressed by Davies (1998) in Australia who commented that women were often not aware of the role of the midwife in maternity care. Together these factors all caused this investigator to ask this question. How do childbearing women perceive the role of a midwife?

It is this investigator's suspicion that, in Australia, childbearing women perceive the midwifery role differently from their European counterpart. The contributing factors might be the differing health care systems and the 'traditionally' established, accepted and recognised midwifery role and practise of the European countries (McKay, 1993; Leach, Dowswell, Hewison, Baslington, and Warrilow, 1998; Luanaigh, 1995; Wiegers, van der Zee & Kierse, 1998). The midwives interviewed in McCrea and Crute's (1991) study in Ireland suggested that many clients were not aware of the midwives' knowledge, responsibilities and skills. This leads back to the question, how do childbearing women in Australia perceive the role of a midwife?

The investigator received her general and midwifery education in England and practised as a midwife for several years in one of London's maternity hospitals which averaged 5000 deliveries per year. It was generally accepted by the pregnant women there that midwives provided care for all pregnant women, delivered their babies and doctors were only contacted for assistance when complications arose. This investigator currently works as a full time
clinical midwifery specialist in the Delivery Suite at a large referral, teaching, tertiary level hospital in NSW, which averages 4000 to 4400 deliveries per year. The investigator therefore has practised as a midwife in England and Australia and noted a difference in the perception of the role of a midwife by pregnant women in these two countries. This purpose of the study was to explore the pregnant women's perceptions of the role of a midwife in Australia.

1.3. Aim and purpose of the study

The aim of the study is to replicate parts of a study by Leach et al (1998) which was commissioned by the Northern Yorkshire Regional Health Authority, to investigate the women's perception of the respective roles of the different maternity care givers in the United Kingdom. In comparison with other European countries, the public health system in United Kingdom closely matches with the Australian Medicare (public health care). The study by Leach et al (1998) is discussed in 3.2. Replication of this study was chosen because there was no precedent research reported in Australia pertaining to the research question. By replicating parts of the study, the investigator aimed to bridge a gap in information in Australia, compare the findings to those by Leach et al (1998), validate and add to the existing information and knowledge on this subject.

The purpose of the study is to explore the childbearing women's perception of the role of a midwife in Australia and to compare these results with the findings by Leach et al (1998). This study is a project conducted as part of
the requirement for a Master in Nursing (Honours) at the University of Western Sydney, Nepean. The following section will provide an overview of the chapters of the thesis.

1.4. An overview of the chapters

A knowledge and understanding of the role of a midwife in current times is essential to the constructive formation of the partnership between the midwife and the pregnant woman. To introduce, establish and provide an understanding of the role of the midwife, the international definition of a midwife in current times is presented in chapter two. World Health Organisation (WHO) (1976, cited in Australian College of Midwifery Incorporated, 1989) stated that the international definition of a midwife is accepted by the World Health Organisation, the International Confederation of Midwives and the International Federation of Gynaecology and Obstetrics.

The application of this definition in Australia and the sphere of practise in relation to the international definition of a midwife is discussed. The position statement and endorsement by the Australian College of Midwifery Incorporated regarding this definition is highlighted.

Whilst the fundamental role of a midwife is to provide maternity care to a pregnant woman, the roles and practises of midwives differ between countries. A brief snapshot of the practises from several countries is included in chapter two in order to provide an insight into the differences in midwifery
roles and practices from countries across the globe. These countries are by no means selected as representative of the practices of the midwives in these regions but merely to highlight the similarities and differences practised in different parts of the globe. The role and practise of a midwife in New South Wales, Australia is included to provide a local perspective of midwifery in this region.

It was suspected that childbearing women in Australia perceive the role of a midwife differently from their counterparts in other countries. This could be due to the different health care systems or ‘traditionally’ established midwifery roles of the various countries. The literature review is presented in chapter three. In the literature review, most of the information and research exploring the midwifery role was from the United Kingdom and the Netherlands. At the time of commencing this study there were no Australian studies exploring the childbearing women’s perception of the midwifery role. Pursuance of articles relevant to this subject was continued. By the time of writing, the investigator had located two studies that were conducted in Australia, investigating the women’s view on the role of the midwife. These two articles were included in the literature review.

The following chapter presents the Western Sydney Health Area, where the participants for the survey were recruited. An overview of the geographical area and demographic details of Western Sydney Health Area are discussed in chapter four. This provides a background of the region where the participants for this survey were recruited. Westmead Hospital is a large
tertiary level teaching referral and research oriented hospital located in Westmead, in Western Sydney Area Health Service. A snapshot of Westmead Hospital, the Women’s Health and Neonatal Care Unit, the Obstetric and Gynaecology Unit, the different models of maternity care at Westmead Hospital and the Westmead Hospital Clinical Information System are included in this chapter. The Westmead Hospital Clinical Information System contributes data to the Midwives Data Collection (MDC), a population based surveillance system which covers all live and still births in NSW (NSW Public Health Bulletin Supplement, 1998).

As previously mentioned, at the time of conception of this project, no Australian studies had explored the childbearing women’s perceptions of the role of a midwife. This survey is a partial replication of a study that was conducted by Leach et al (1998), to investigate childbearing women’s perception on the roles of the different health professionals providing maternity care in UK. The methodology used in this current survey is discussed in chapter five. Methodology involves questioning the manner in which knowledge relating to what exists can be gained (Cormack, 1996). Leach et al’s (1998) questionnaire was partially replicated for this survey. The chapter highlights the type of survey used in this project and describes consultation with a statistician who reviewed the format of the questionnaire for the purpose of planning statistical analysis. The format of the questionnaire and the prompt card and the rationale for the inclusion of demographic details are presented. The sample, sample size, venue of the recruitment of participants, ethical considerations, and the time frame for data
collection are included in chapter five. This is followed by the data analysis and interpretation of results in chapter six.

Quantitative and qualitative data were obtained by using the semi structured questionnaire. Two methods were used to analyse the results. Quantitative analysis using descriptive statistics to present the results is discussed. The quantitative results are presented by using charts, tables and figures. Statistical significance of the results was set at 0.05. Estimates are expressed as percentages together with their 95% confidence intervals (95% CI). Confidence intervals were included in order to quantify the variability of the estimates from this particular sample of 108 women. The formulae for the confidence intervals are presented in chapter six.

Thematic analysis was used to analyse the qualitative data. The common words were coded and labeled. Themes, major and sub categories that emerged from this analysis were identified. The relevant midwifery tasks associated with each theme and category were accordingly placed with the themes and categories. The themes, categories and midwifery tasks were summarised and are presented in tables. The ‘supportive’ and common findings from the quantitative and qualitative analysis are discussed.

Chapter seven revisits the purpose of the study, discussion of the findings from this survey, comparison of these findings with findings by other studies, in particular the findings by Leach et al (1998), which was one of the purposes of this study. Limitations of the study are highlighted, followed by the conclusion and recommendations for the extension or replication of this study.
The following chapter will introduce the role of the midwife, beginning with the international definition of a midwife in current times and providing a snapshot of the role and function of a midwife in different countries, including Australia.
Chapter Two: Role of the midwife

2.1. Introduction

This chapter introduces the international definition of the midwife and the statement and comments on the scope of practise of the midwife in Australia officially made by the Australian College of Midwives Incorporated. The role and practise of a midwife from several countries is also presented. The rationale for including this in the discussion is to present an insight into midwifery practise in different countries and to provide a cross sectional global snapshot of the role and function of a midwife. The role of a midwife differs between countries, as does their education. In some countries, nursing is a prerequisite for midwifery, however, in other countries, a nursing qualification is not required.

Although not necessarily representative of their region of the globe, selecting countries from different parts of the world will give an insight into the midwives' practise from that particular region. The countries selected are The Netherlands, United Kingdom, Denmark, Sweden, United States of America, Taiwan, Thailand, New Zealand and Australia.

The discussion includes historical aspects of the role and functions of the midwife of each country; the legislative obligation and/or requirement of the midwife in the individual country; the education and training of the midwife; and the social, cultural and political influences on the practises of the midwife.
2.2. International definition of a midwife in current times

To establish an understanding and definition of the term 'midwife' in current times, the international definition of a midwife is highlighted. The World Health Organisation (WHO), International Confederation of Midwives (ICM) and the International Federation of Gynaecology and Obstetrics (FIGO) accepted the following international definition of a midwife. WHO (1976, cited in ACMI, 1989) defined a midwife as:

...is a person who, having been regularly admitted to a midwifery educational program, duly recognized in the country in which it is located, has successfully completed the prescribed course of studies in midwifery and has acquired the requisite qualifications to be registered and/or legally licensed to practise midwifery. (p. 4).

The educational program, professional licensing and practise of a midwife is therefore subject to the jurisdicational requirement of the specific country. These regulations may differ between countries. The Australian College of Midwives Incorporated (1989) acknowledged and accepted the international definition of a midwife and stated that “this definition is recognised by all midwives as a good description of their role” (p. 4). The scope of practise of a midwife includes antenatal, intrapartum and postpartum care; education for parenthood and health counseling. Midwives are trained health professionals, knowledgeable and capable of holistically caring for the woman; delivering antenatal, intrapartum and postnatal care and being responsible for that care
(McCrea, 1993). WHO (1996) stated that midwives are the most appropriate health care provider for the care of normal pregnancy and birth, including risk assessment and recognition of complications. Midwives provide maternity care and services in different health settings and the community. Home birth midwives are licensed to conduct their antenatal care and birth in the homes of the pregnant woman.

The following is an excerpt from Australian College of Midwives Incorporated (ACMI) Standards for the Practise of Midwifery (1989) regarding the sphere of practise of a midwife:

She must be able to give the necessary supervision, care and advice to women during pregnancy, labour and the postpartum period, to conduct deliveries on her own responsibility and to care for the newborn and the infant. This care includes preventive measures, the detection of abnormal conditions in mother and child, the procurement of medical assistance and the execution of emergency measures in the absence of medical help. She has an important task in health counseling and education not only for the mothers, but also within their family and their community. This work should involve antenatal education and preparation for parenthood and extends to certain areas of gynaecology, family planning and child care. She may
practise in hospitals, clinics, health units, domiciliary conditions or in any other service. (p. 4)

Whilst a midwife is commonly referred to as a female person and the pronoun 'she' was used by the ACMI to describe a midwife, there are male midwives amongst the predominantly female oriented midwifery profession (ACMI, 1989). At the time of writing at the investigator's health establishment there is only 1 male midwife amongst an approximate 120 full-time and part-time practising midwives, supported by a pool of casual midwives.

Kraus (1997) commented that if a person is certified by the relevant national organisation after the appropriate midwifery academic preparation, licensed by law to practise as midwife and holds accountability to the public, then, that person is a midwife; otherwise, he/she is a traditional birth attendant (TBA).

The World Health Organisation (1992 (1), cited in Kraus, 1997) defined a traditional birth attendant (TBA) as "A person who assists the mother during childbirth and initially acquired her skills by delivering babies herself or through apprenticeship to other traditional birth attendants" (p. 69).

WHO (1996) then explained that it is inevitable that in many developing countries, due to the shortage of qualified midwives in villages and health centers, the traditional birth attendants provide maternity services required by the respective populace. Kraus (1997) acknowledged and supported the
important role of the traditional birth attendants in regions where women are not able to access the services of professional midwives.

2.3. Role of the midwife

The role of the midwife has subsequently evolved and diversified through different ages and parts of the globe. This chapter examines the role of the midwife in different countries including Australia.

Childbirth is a personal and familial event experienced by the pregnant woman with the culmination and expectation of the delivery of a healthy baby. In this process, the midwife forms a special relationship with the woman, her partner and family. The inclusion of significant persons that are of importance to the woman is essential to ensure a healthy positive experience of pregnancy and childbirth. The inclusion is supported by the philosophical statement by ACMI (1998):

The midwife forms a partnership with the woman as she experiences the life process of childbearing...The essence of midwifery care incorporates the inclusion of the family, and where possible those considered significant to the woman (p. 4).

Midwives are expertly trained health care professionals. The fundamental role and function of the qualified midwife is to provide holistic midwifery care to the childbearing woman. They provide expert care of pregnant women during
pregnancy, in the intrapartum and postpartum period (Robinson, 1989). Fundamentally, midwives provide holistic normal maternity care. McCrea (1993) states that the primary role of the midwife should be to assist the pregnant women through guidance, teaching, provision of social support and encouragement.

The role of the midwife encompasses holistic pregnancy care, where the midwife’s responsibilities involve the prenatal counseling, advice regarding diet, hygiene and family planning. The practise and responsibilities of the midwife in the individual countries is legislated and directed by the midwifery statutory board of those countries.

The role of the midwife involves the personal attributes of the midwife and sharing her/his midwifery skills, knowledge and experience during the care of these childbearing women (Bryar, 1995; ACMI, 1998). The ACMI (1998) stated “... the role of the midwife includes sharing knowledge and wisdom in a reciprocal manner with the woman” (p. 5).

Whilst the midwife’s primary role is directly involved in the delivery of care to childbearing women, the midwife’s role is not focussed on the care of the childbearing women only but also on their family. Midwives are not the sole providers of care to childbearing women, they work in partnership and collaboration with other health professionals as team members who are involved in providing care for these women (ACMI, 1998).
2.4. Role of a midwife in a partnership

In Australia, midwives are nurses, and Christensen's (1990) theory of nursing as a partnership can be applied to midwives. Within nursing in general, partnership between a nurse and patient enables the nurse to offer a learned knowledge to a patient who is passing through a health related event, assisting in reducing adverse health problem and treatment.

Christensen (1990) explained that there are three major interrelated elements in such a partnership. Firstly, life is viewed as a passage. Secondly, mutual work is a specific patterned interaction between the nurse and patient. This is important to ensure a positive outcome for the patient's passage through the health related event. The third element consists of the three specific contextual determinants, namely episodic continuity, mutual benevolence and anonymous intimacy.

According to Christensen (1990) in the context of partnership, because of the nature of their work, a nurse has access to an immediate closeness with a patient and the episodic contacts foster goodwill and a present source of help for the patient. Similarly, in midwifery, the pregnant woman enters into another passage in her life, that is, pregnancy. This new event in her life brings her into contact with a midwife. By virtue of the nature of a midwife's role, the midwife is able to offer a specific learned knowledge to the pregnant woman who is passing through the pregnancy journey.
The midwife and pregnant woman enter into a specific interaction and relationship in the course of maternity care and services. Because of the immediate closeness with a pregnant woman, the midwife is a source of help, support and goodwill to the pregnant woman through their journey together, fostering an anonymous intimacy.

It is this investigator's opinion that the relationship between a midwife and pregnant woman is that of a partnership. That is, the pregnant woman contributes and exercises ownership, choice and control on her maternity care, with the expert advice and contribution from the midwife. The midwife will assist in facilitating a positive experience and outcome for this woman. Partnership involves mutual commitment between the midwife and pregnant woman. The fostering of a favourable partnership is dependent on the confidence of the midwife and her/his role as midwife.

Walsh (1999) explained that in her practise, the focus was on midwives providing continuity of care by a midwife known to the pregnant woman. This was the aim of their practise. The pregnant woman was encouraged to participate in her maternity care throughout the period of the pregnancy, labour and delivery of the baby and in the postpartum period. Walsh (1999) reported that this model of midwifery had a significant positive impact on the woman's experience of pregnancy and childbirth. This impact was predominantly influenced by the midwife and pregnant woman's relationship as partners. The women described the midwife as a 'friend'.
2.5. Role of the midwife in different countries

The role of a midwife is viewed differently in different countries and these views could have been influenced by the socio-economic situation and culture of the respective countries (Sledzik, 1991; Mander, 1995). The status accorded to the midwife is also influenced by the way a midwife's role is perceived (Seibold, Miller & Hall, 1999; McCrea, 1993; McCrea & Crute, 1991).

The World Health Organisation (WHO, 1996) acknowledges the unique health care system of the individual countries. The responsibilities, education and role of the midwife are subject to the legislative requirement of the respective countries and influenced by the health care system, socio-economic and cultural situation.

The midwifery educational curriculum is different between countries. In the industrialised and affluent countries, the midwife is educated in basic midwifery care, technological monitoring of a woman, for example, the cardiotocograph (CTG) monitoring\(^1\) and they are better informed than their counterparts in developing countries in other pregnancy diagnostic procedures such as obstetric ultrasound, chorionic villus sampling and amniocentesis. However, despite these differences, the WHO (1996) added that throughout the world, the midwife is the most appropriate and most cost

---

\(^1\) CTG monitoring is electrical fetal monitoring of the fetal heart rate to monitor and assess fetal well being and contractions.
effective health care provider of normal pregnancy and birth; that includes assessment and recognition of risks or complications.

In the following section, the role of the midwife in various countries is examined by looking at both the similarities and differences in their education, practise, socio-economic and cultural influences on their practise and professional position in the health care system.

2.5.1. The Netherlands

The midwives in the Netherlands occupy a unique and key position in the provision of maternity care. Midwives form part of an integral health care team delivering maternity care to the pregnant women (van Teijlingen & McCaffery, 1987). In the Netherlands, this prestigious position of the midwife in delivering maternity care is greatly influenced by the socio-economic, cultural, political and health care system in that country (Bradley & Helsing Bray, 1996; Mander, 1995).

Midwives in the Netherlands are not nurses. Bradley and Helsing Bray (1996) wrote that in The Netherlands, childbirth is viewed as a normal process. The direct entry midwifery educational program is focussed mainly at normal processes of pregnancy and childbirth and detection of deviations from the normal (Bradley & Helsing Bray, 1996). The training of the midwife in the Netherlands prepares them for autonomous and independent practise. The curriculum focuses on pregnancy and childbirth as a normal event. Women are comprehensively cared for by midwives and the delivery of the baby is
attended by the midwife (Mander, 1995; Hadley, 1990). Midwives attend to all aspects of maternity care in the antenatal, intrapartum and postpartum period. When obstetric problems or complications are recognised, women are duly referred to an obstetrician (van Teijlingen & McCaffery, 1987; McKay, 1993; Wiegers, van der Zee & Keirse, 1998; Bradley & Helsing Bray, 1996).

The midwives' role as autonomous independent practitioners allows them to conduct deliveries in the hospital or attend to home births as requested by the pregnant women (van Teijlingen & McCaffery, 1987). McKay (1993) reported that more than 46% of births were attended by midwives who either operate from a private practise or in partnership with other midwives. The independent and autonomous practise of the midwife is recognised and respected by their colleagues in health care and by the community (Mander, 1995; Wiegers, van der Zee & Keirse, 1998, McKay, 1993; van Teijlingen & McCaffery, 1987).

The midwives are financially independent, their sources of income are from private health insurance or government subsidised remuneration in return for the services provided (van Teijlingen & McCaffery, 1987; Mander, 1995). Financial remuneration from the government contributes to the financial viability and survival of the midwife, enabling them to practise in this manner. Mander (1995) explained that "...protection by the state takes the form of ensuring that, if a midwife is practising in the mother's home region, midwifery care is subsidised, thus offering financial encouragement to mothers to seek midwifery care."
The Dutch maternity care system receives significant attention from the midwifery and medical fraternities from countries all over the world. They are interested in the success of their model of maternity care because of their high percentage of home births, low perinatal mortality rates and low medical intervention compared to the other industrialized countries (Wiegers, van der Zee & Keirse, 1998; McKay, 1993). In summary, maternity care in the Netherlands is primarily provided by the midwives who are independent practitioners.

2.5.2. United Kingdom

In the United Kingdom midwives, in their professional capacity, are qualified to care for women during their pregnancy and the normal childbearing process (Robinson, 1989). The midwives trained in the United Kingdom are independent practitioners, qualified and professionally responsible to provide antenatal, intrapartum and postpartum care to pregnant women. These midwifery roles are fulfilled by the qualified midwife according to the legislative requirements of the midwifery statutory board. In the presence of any obstetric problem, appropriate referral to the obstetrician is initiated by the midwives (Robinson, 1989). This is in accordance with the WHO's definition of the role of a midwife (Robinson, 1989; WHO, 1996).

In the United Kingdom, midwives may be nurses or may have enter midwifery by direct entry. There are many Registered General Nurses (RGNs) and Registered Sick Children's Nurses (RSCNs) in the United Kingdom, who undertook midwifery training for their post registration and dual certification
(Bent, 1993). Reasons cited by Bent (1993) for post registration in midwifery are: firstly, for health visitor training, nursing and midwifery is a pre-requisite qualification; and secondly, having a midwifery qualification places the RGNs in a more favourable position for senior nursing positions. There are many qualified midwives, who are neither RGNs or RSCNs. These midwives completed their midwifery education by direct entry or pre registration midwifery program (Bent, 1993).

The midwifery profession in the United Kingdom is regulated as a health profession separate from nursing (Bourgeault & Fynes, 1997). The midwives who have successfully completed their midwifery education are eligible to register with the United Kingdom Central Council for Nurses, Midwives and Health Visitors. They would be entitled to practise as Registered Midwives.

Bluff and Holloway (1994) stated that except for cases of precipitate labour, most pregnant women receive their care from a midwife; the health professional who is the most senior person to be present at over 80% of the deliveries. Today, approximately, 99% of births in the United Kingdom occur in hospitals (Bent, 1993). The role of a midwife as the primary maternity care giver was gradually eroded by the shift of a community based maternity care to a 'medicalised' birthing in a hospital (Campbell, Macfarlane, Hampsall & Hatchard, 1999).

In the 1950's and 1960's, there was a higher percentage of babies born at home than is currently the practice. The midwife was predominantly working
in the community and delivering babies in the clients' homes. Comprehensive maternity care was provided by a midwife who was a primary maternity care giver. This care was delivered either from a health center in the local community or home visits by the midwife. There was a trend in the 1970's to shift home births and maternity care to a hospital based medicalised care and delivery. The rationale was that pregnancy and delivery of the baby was normal in retrospect but prospectively, women were viewed as patients and a hospital was the safe place to deliver a baby (Stewart, 1999).

This gradual erosion of the role of the midwife from an autonomous primary care giver providing holistic care to the pregnant women and delivering their babies, concerned the midwives. Reviews were undertaken to assess and re-evaluate the role of the midwife. Robinson (1989) wrote that the medical profession have taken over the 'normal' maternity care of a pregnant woman and the midwife's skills and knowledge were being under utilised. The midwife was not performing in the professional capacity of a midwifery practitioner.

There was an ensuing investigation of this midwifery 'disservice'. In the early 1990's ongoing evaluation and assessment of maternity services in the United Kingdom continued. The Health Commission in the United Kingdom set up an expert group to investigate and assess the maternity services that were delivered to the childbearing women (Mason, 1995). The medical model of care was evaluated and deemed to be inappropriate for the women who were in the low risk pregnancy category. In 1993, the “Changing Childbirth” report
was published by the Department of Health in the United Kingdom as a result of this investigation.

In summary, the "Changing Childbirth" report is a review of the policy of care accorded to the childbearing women (Mason, 1995). Common themes that emerged from the investigation reported that continuity of care, choice of care and knowing your midwife were important to the childbearing women. The report identifies the unique needs of the individual pregnant woman and recommendations for alternative models of care are suggested (Walsh, 1999; Mason, 1995). Leach et al (1998) commented that there was an implicit assumption in the Department of Health (1993) "Changing Childbirth" report that low risk pregnant women prefer a midwife to provide most of the care.

The role of the midwife in the provision of midwifery care to a pregnant woman is important. Bent (1993) commented that in the UK in 1993, there was a trend and demand for home confinement and total midwifery care from a midwife and as a result of this, some midwives have taken up private midwifery practise. That is, the midwife will provide complete midwifery care including delivery of the baby in the home of the pregnant woman, for a fee for service.

The midwife remains a part of a professional team responsible for providing care for all pregnant women and must share the responsibility for caring for women with normal pregnancies with the general practitioner (GP). The
midwives refer the pregnant women with complications associated with pregnancy to the obstetrician for specialist care (James, 1995).

Following the ‘Changing Childbirth’ report, Walsh (1999) explained that there was considerable debate regarding women’s preference to be cared for by a midwife that they know. As a result, several schemes were initiated and trialled to focus women centered care, with continuity of care to be provided by a midwife throughout the pregnancy, delivery of the baby and care of the woman in the postpartum period (in the hospital or community).

There was an effort to re-establish and reclaim midwifery led care. One such scheme was the Team Midwifery Program (TMP). The ideology of the TMP is that one on one care be provided by a ‘named’ midwife. This midwife will provide a comprehensive midwifery care encompassing the antenatal, intrapartum and the postpartum period (Page, 1995). Some of the schemes were on an experimental basis.

Campbell et al (1999) highlighted some of these schemes or models of care. They are the ‘know your midwife’ scheme at St Georges Hospital in London, the ‘home from home’ scheme at Leicester Royal Infirmary, the ‘Midwife Managed Delivery Unit’ at Aberdeen Maternity Hospital and the ‘Midwifery Development Unit’ at Glasgow Royal Infirmary Hospital. All these were primarily focussed on providing midwife led care to pregnant women who are in the low risk pregnancy group. The current trend in the United Kingdom is to transfer the maternity care of low risk pregnant women, to the primary care by
a midwife. In the event of obstetric or medical problems or complications, appropriate referrals to an obstetrician will be initiated by the midwife.

2.5.3. Scandinavian countries

2.5.3.1. Denmark

In Denmark, “jourdemoder”, a midwife, translates to “earth mother” (McKay, 1993). The midwives in Denmark are not nurses; however some have been enrolled in a nursing program or received their nursing education in another country. The midwives in Denmark are employed by the National Health Services, where 98% of the women have their babies in the hospital. These midwives are responsible for the care of women with uncomplicated pregnancies. They provide extensive maternity care in the antenatal, intrapartum and postpartum period (McKay, 1993). Thompson (1998) stated that the midwives in Denmark and Sweden had contributed to a remarkable reduction in the maternal mortality rate in these two countries.

2.5.3.2. Sweden

Swedish midwives are qualified nurses and practise mainly in a hospital or in antenatal clinics. They are autonomous practitioners, providing maternity care with the other Swedish maternity care providers, that is, the general practitioners, the obstetricians and physiotherapists. The midwives provide care for the women with normal as well as complicated pregnancies, labour and the postpartum period. The pregnant women usually sees the same midwife during their pregnancy. Ninety nine (99%) percent of births occur in hospitals. Midwives are the maternity carers providing care in labour and
delivering babies. Obstetricians are only involved in instrumental and operative deliveries (McKay, 1993).

2.5.4. United States of America

Because of its excellent reputation, the Netherlands is often used as a baseline for comparisons on midwifery issues. The midwifery service in the USA differs from that in The Netherlands, primarily because the Netherlands' cultural, socio-political and health care service is different from that in the USA (Bradley & Helsing, 1996). Bradley and Helsing (1996) and Ernst (1996) commented that the health care system in the USA is disorganised and fragmented and that the maternity care is dominated by medical practitioners. Ernst (1996) stated that the maternity care provided by obstetricians in a hospital is governed by their individual practises, for a fee for service rendered. These obstetricians are assisted by obstetric nurses employed by the hospital to assist in the delivery of maternity care designated by the obstetricians (Ernst, 1996).

Bourgeault and Fynes (1997) explained that the midwifery profession in the USA is divided into two groups of midwives. They are the nurse and non nurse or lay midwives. The nurse-midwives predominantly practise in health institutions and the lay midwives provide maternity services in the clients' homes. A majority of American midwives are registered nurses. Kraus (1997) stated that the registered nurses who have successfully completed their midwifery education or certification requirements will be eligible to register with the American College of Nurse-Midwives (ACNM) or the ACNM
Certification Council, Inc (ACC), respectively. They would be certified and entitled to practise as certified nurse-midwives (CNM) or certified midwives (CM) (Kraus, 1997). However, those professionally trained midwives who are not trained as nurses are certified by the Midwives Alliance of North America (MANA) (Kraus, 1997).

Obstetric nurses are neither nurse-midwives nor lay midwives. Ernst (1996) explains that they practise differently from certified midwives in the health institutions. Obstetric nurses are registered nurses who work under the direction of the obstetrician, providing care designated by the obstetrician. Certified midwives work in collaboration with the obstetricians and will confer with the obstetricians if there are obstetric problems.

The American College of Nurse–Midwives (1997) acknowledges that the CNM and CM were often the initial health care personnel to provide continuous and comprehensive health care to the childbearing women. In this capacity as a primary health care provider, the CNM and CM are responsible and accountable for the provision of comprehensive primary health service and to refer their clients to the relevant services as required (ACNM, 1997; Ernst, 1996).

The American College of Nurse–Midwives (1997) went on to explain “Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing the large majority of personal health care needs, developing a sustained partnership with patients, and
practising within the context of family and commitment” (p.373). There was a survey in 1994 to identify the contemporary scope of American nurse midwifery. Fullerton (1994) commented that the survey findings identified that the common theme for the role of the nurse-midwives was that of a primary care giver (refer to section 3.4).

Prior to the 1970's, the relationship and balance of power between the medical profession and midwives was not on equal standing. Midwifery in the USA had suffered from a lack of support and rivalry from the medical profession, and was subjected to medical dominance (Scoggin, 1997; Rothman, 1984; Ernst, 1996).

However, evolving events from the social changes in the 1970's shifted the unequal balance and dominance of the medical profession in the arena of maternity care (Scoggin, 1997). Women were pursuing careers, postponing childbirth and seeking minimal medical and technological intervention in childbirth (Scoggin, 1997; Ernst, 1996). The proactive action by these well informed middle class affluent women, for less invasive forms of childbirth and the diminishing demand for obstetric services, catapulted and elevated the role and practise of the nurse-midwives in the USA (Scoggin, 1997).

The resurgence of midwifery as an ‘alternative’ non invasive minimal technological form of childbirth, re-established public confidence and respect in the role of the nurse-midwife (Rothman, 1984; Scoggin, 1997). This unequal balance of power between the medical and midwifery professions was shifted
more favourably towards the midwives as a result of this ‘cultural’ revolution (Scoggin, 1997).

The nurse-midwives directed the care of the normal processes of pregnancy and childbirth, which was demanded by the contemporary women. Ernst (1996) commented that as a result of this, there was an increase in the number of health establishments, with the support of the obstetricians, initiating and opening staff privileges for the nurse-midwives to provide maternity care in hospitals and birthing centers.

In summary, the certified nurse-midwives and certified midwives predominantly work in health institutions, conferring with the obstetricians if there are obstetric or medical problems. The obstetric nurses work under the supervision of an obstetrician and the lay midwives deliver their maternity care in the clients’ homes.

2.5.5. Asia

2.5.5.1. Thailand

There is no research and there are few reports on the role and practise of the midwife in Thailand. In a discussion article York, Bhuttarowas & Brown (1999) give a snapshot of nursing and midwifery practises in Thailand. The article provides an insight into the role of the midwife in Thailand, which is situated in the heart of South of South East Asia.
York, Bhuttarowas & Brown (1999) explain that in Thailand, all registered nurses are certified nurse-midwives, regardless of their diploma or degree status. The midwifery component remains an important aspect of the nursing profession and is incorporated in the nursing education program.

In Thailand’s health care system, the physicians practise predominantly in hospitals and district clinics. In the university hospitals, the physicians are responsible for the women who are confined there, making any decisions regarding monitoring, labour and delivery of the baby (York, Bhuttarowas & Brown, 1999). Whilst nurses practise in these two types of establishments, they are also available at the sub district health clinics. The sub district health clinics provide a limited health care delivery to the rural communities. There is at least one nurse midwife to provide maternal and childcare to each clinic in the rural community. These nurse-midwives are responsible for the care of women in the rural areas and non-teaching hospitals, attending to their uncomplicated labour and delivery of the baby.

Due to the lack of qualified nurse-midwives, the investigators explained that traditional birth attendants continue to provide a significant portion of maternal and child health care to the rural women. These traditional birth attendants have no formal training in maternity care. They obtained their ‘skills’ by observing other women who have practiced similar roles in the villages.

The government’s policy in increasing health care facilities to the rural areas resulted in an improvement in accessibility by the pregnant women in the
community to the sub district health clinics. As a result of this, the nurse-midwives attending to the deliveries are increasing and the demand for traditional birth attendants is declining (York, Bhuttarowas & Brown, 1999).

2.5.5.2. Taiwan

There were no research reports on the role of the midwife in Taiwan. An opinion article by Lin (1987) provided an insight into the role of the midwife and midwifery practises and services in Taiwan. A lecturer at the School of Nursing at Taipei Medical College and the Chief of the Division of Nursing and Midwifery at the Bureau of Public Health in the Republic of China, Lin (1987) gave a brief historical account of the midwifery profession in Taiwan, the declining practise and role of the midwife in Taiwan and the factors contributing to the decline of the midwifery profession.

Lin (1987) stated that midwifery in Taiwan was an ‘attractive’ occupation. Midwives were appreciated and respected by the communities. Midwifery education was standardized under the Ministry of Education in 1945 and midwives were attending 5 times more deliveries than the obstetricians. She explained that the baby boom after World War 2 accelerated the nurse midwifery training because there was a lack of qualified personnel attending to deliveries. Lin (1987) explained that at the time of writing the article, nursing and midwifery training in Taiwan were consolidated because of the similarities in the educational curriculum of the two professions. These nursing midwifery courses were conducted at the Medical Technical Schools, Home Economics Schools and Junior Colleges of Nursing and Midwifery.
In 1983, there were 4656 qualified midwives registered with the Department of Health. Sixty three percent (63%) of these midwives were employed by public and private hospitals or clinics. Thirty percent (30%) of these midwives were practising independently and some of these independent practising midwives were employed by the health organisations as nurses (Lin, 1987).

Lin (1987) explains that due to the socio-economic and health structure changes in Taiwan, the 'traditional' maternity care provided by the midwives was taken over by the medical profession. Most of the pregnancy related care and deliveries were now conducted by the doctors in a hospital. The practise of the midwives at a community level was thus usurped and transferred to the hospital. The younger generation were more confident in the 'western' medicine culture that had evolved as a result of constitutioanl and socio-economic changes. The number of deliveries by private midwives and health station midwives were reduced to 14.05% and 1.23 % respectively.

The modernisation of Taiwan, the development of medical insurance and the attitudinal changes towards preferences for delivery of a baby in the hospital were cited as contributing factors of the decline of the midwifery profession. Lin (1987) suggested several measures to restore the role of the midwife in Taiwan. These are to encourage young educated midwives to practise in the communities to promote the midwifery profession, setting up midwifery group practise, maintaining close communication and relationships with the obstetricians in the hospital and upgrading midwifery education to a post graduate level.
In summary, midwives in Thailand practise midwifery in two settings, that is, in a hospital or in the rural community. Midwives working in hospitals are under the supervision of the obstetrician and the midwives in the rural community practise autonomously. Taiwan recognises the important role of a midwife in the community and authorities have suggested options in encouraging the midwives to practise their midwifery in the community whilst maintaining a close link with the medical profession in the hospital.

2.5.6. Pacific region

2.5.6.1. New Zealand

Midwives in New Zealand have practised independently from medicine and nursing since 1990. Stewart (1999) stated that midwifery candidates are direct entrants into the polytechnic institutions, therefore, the midwives trained after 1990 are not required to be nurses. The midwifery curriculum is separate from nursing.

The midwives in New Zealand are autonomous, independent private practitioners by virtue of the 1990 Nurses Amendment Act (Stewart, 1999; Fleming, 1998). The midwives may practise privately, as part a of team or in partnership with other midwives, providing complete midwifery care, inclusive of antepartum, intrapartum and postpartum care. They have visiting privileges to practise in the hospitals and community settings; and they receive payment for their services from the government (Fleming, 1998). If there are any obstetric problems, consultation with their obstetric colleagues may not necessarily require that care of the woman is relinquished to the obstetrician.
Legislation allows these midwives to prescribe certain antacids, iron preparations, oral contraceptives, condoms, Depo-provera and antibiotics for childbirth related infections. They have access to laboratory facilities and ultrasound (Stewart, 1999).

2.5.6.2. Australia

Midwifery study in Australia is at a graduate level after completion of the nursing degree program (Leap, 2000). The student midwife must be a registered nurse prior to commencing midwifery education (Glover, 1999). In Australia, there were no direct entries for midwifery studies until recently in March 2002. The inaugural 3-Year Bachelor of Midwifery commenced in South Australia and Victoria (Byrne, 2002). Following completion and attainment of their midwifery qualifications, all midwives in NSW must register with the NSW Nurses' Registration Board in order to practice midwifery in NSW.

In New South Wales, nursing education was transferred to the tertiary sector in 1985, with the other States in Australia following by the year 1990 (White, 1999). Consequently, midwifery education moved from a hospital based training to a postgraduate qualification (White, 1999). The NSW Midwifery Taskforce Report (1996) stated that the transfer of midwifery education to the tertiary sector was effective since 1988. This transfer was conducted at varying rates in the different states of Australia.
Midwives may choose to practise in a hospital or community setting. In Australia, the majority of the midwives are employed by and work in a hospital (White, 1999). Davies (1998) commented that the majority of maternity care in the hospitals is provided by the midwives and they are usually the principal carers of women during pregnancy and childbirth.

In Australia, a ‘compulsory’ health care cover of 1.25% of gross salary is levied on all income earning Australians and is known as MEDICARE (King, 1993). Approximately 50% of women have some additional form of private health care insurance for childbirth. This enables the women to attend an obstetrician or private hospital of their choice (King, 1993). Women without this private health insurance cover have access to a public hospital. Care is provided by the midwives and doctors employed in that hospital (King, 1993).

There is a current trend by some childbearing women to shift ‘normal births’ back to the home setting. This is largely instigated by childbearing women who desire to birth their babies in a home environment instead of a hospital setting (Harris, 2000). The independent (homebirth) midwives attend to these women who have chosen homebirths.

There is a small percentage of midwives who practise as independent (home birth) midwives. These independent midwives practise separately from the medical profession, providing comprehensive midwifery care, which covers the antenatal, intrapartal and postpartal period. Births are conducted in the homes of the pregnant woman (Harris, 2000). The remuneration for this
service is paid by the pregnant women who chose this option of childbirth service (Flint, 1998, cited in Harris, 2000).

Lecky-Thompson (1996, cited in Harris, 2000) stated the lack of expansion in independent midwifery is largely due to the lack of government funding, the midwives were not able to claim MEDICARE rebates like their medical counterparts and the increasing cost and difficulty in obtaining professional indemnity.

2.6. Conclusion

In conclusion, the wide ranging role and function of a midwife reflects the adaptability of the midwifery profession. A qualified midwife is a professional health care person who is capable of providing and delivering holistic maternity care to childbearing women. This is defined within the parameters of the international definition of a midwife in current times. The fundamental role and function of the qualified midwife is to provide a holistic midwifery care to the childbearing woman and this includes antenatal, intrapartum and postpartum care.

The role of a midwife differs between countries. These differences are largely related to social, cultural, economic and political factors including whether childbirth is seen as a normal or medical event. The consistency of midwifery care in the community, home and hospital must remain culturally sensitive. In some countries, the role of the midwife encompasses the circumspect pregnancy care, where the midwife is responsible and involved in the prenatal
counseling, advice regarding diet, hygiene and family planning. The manner in which this care is delivered is legislated/directed by the respective midwifery statutory board and governmental legislature.

The World Health Organisation (1996) acknowledges that the midwifery educational curriculum, training and role of the midwife differ between countries. Midwives are recognised as the most appropriate primary health care provider in the care of normal pregnancy. In fact, the midwife is the key provider of maternity care in many developing countries (Mati, 1994 and Chintu & Susu (1994, as cited in WHO, 1996)).

In the industrialised and affluent countries, apart from education in basic midwifery care, the midwife is taught technological monitoring of a woman, for example, cardiotocograph (CTG) monitoring, interpretation of ultrasonography results and obstetric care of high risk pregnant woman.

In less developed countries, the role of the midwife is focussed on providing the elementary care of monitoring pregnancy, delivering the baby and looking after the woman after delivery in the hospital or community. This chapter highlighted the role of a midwife from several countries to provide an insight into similarities and differences in the role and practises of midwives in different countries. The next chapter presents a literature review of the role of a midwife and relevant research that has been conducted to add to this knowledge.
Chapter Three: Literature Review

3.1. Introduction

In order to establish the current knowledge and to prevent duplication of a similar project, a comprehensive literature search pertaining to this study was conducted (Tait & Slater, 1999). The avenues visited to facilitate the search for relevant literature included internet based programs like Yahoo and Alta Vista, CINAHL (Cumulative Index to Nursing and Allied Health Literature) CDROMs, reference lists of relevant articles and books and nursing and midwifery journals. It was noted that the majority of the relevant literature reviewed relating to this research topic comprised research reports and articles originating from United Kingdom, Ireland, United States of America and Singapore.

Midwifery practise and the unique role of the midwife in the Dutch maternity care system and community perception of the role of the midwife there had received significant attention from various countries. In the absence of research reports from The Netherlands regarding the women’s perception of the role of the midwife, opinion and discussion papers were reviewed and included in the literature review.

At the commencement of this project in 1998, it was noted that there was a gap in Australian information pertaining to the childbearing women’s perception of the role of the midwife. However, by the time of writing this thesis in 2002, two articles from Australia on this research topic had been
located. The review of these two articles was included in this chapter. The literature review is presented topically with the purpose of presenting and discussing issues pertaining to the midwife and the midwife's role. Studies were discussed under the heading of these issues.

The literature review in this chapter is presented under the following headings:

- Women's perceptions of the roles of maternity carers
- Women's expectations of the midwife
- Midwives' perceptions of the role and practise of the nurse-midwife
- Multidisciplinary team's perceptions of the role a midwife
- Relationship between the midwife and clients
- Women's belief in a midwife's knowledge
- Social changes and the impact on the midwife's role
- Choice of midwife led maternity care
- Midwife, part of the maternity health care team
- Midwife, Nurse and Birth Attendants

3.2. **Women's perceptions of the roles of maternity carers**

A partial replication of the study by Leach et al (1998) was conducted by this investigator, to explore childbearing women's perceptions of the role of a midwife. The study by Leach et al (1998) was chosen because the health care system in the United Kingdom and Australia are similar. Both healthcare systems provide their citizens with public health care, with the options of private health cover (http://www.nhs.uk/nhsguide/home.htm and
In this section, the study by Leach et al (1998) is discussed. Midwives are perceived to be health professionals trained to deliver babies. Leach et al (1998) conducted a maternity caregivers project study in Leeds, United Kingdom which was commissioned by the Northern Yorkshire Regional Health Authority. The objective of their descriptive study was to investigate women’s perceptions about the role of the different maternity carers and the tasks that these maternity carers are qualified to perform. The different staff providing maternity care to these childbearing women in the hospitals were the midwives, general practitioners and the obstetricians. They reported on the findings from the second stage of the project. The project involved a team of researchers from the University of Leeds and the staff at St. James Hospital, also in Leeds.

The participants for this study were recruited from two hospitals; an urban and a rural hospital in the north of England. The urban inner city hospital has approximately 5000 deliveries per year and the other hospital serves a mixed rural and urban population with 2000 deliveries per year.

The study included women of all parity, that is, first time pregnant women (primigravidas) were also included. They were between 16 and 24 weeks’ gestation. A final sample of 247 women were recruited and interviewed in their homes.
There were two stages in this study. In the first stage, the women who were waiting for an ultrasound scan, were approached by the researcher to participate in the study. Once the woman's eligibility was established, consent was obtained. The woman would be requested to complete a five minute screening questionnaire about preferences for maternity care, care received and demographic details.

If the participant agreed, in the second stage of the survey, an appointment for a follow up interview with the participant, was arranged. This appointment was scheduled for the first week following the initial contact with the researcher. The recruitment phase from the two hospitals took 31 weeks. Two researchers were involved in this recruitment process.

The follow up interviews were conducted in the participants' homes. Semi-structured interviews were used for this descriptive study. The interviews were for a minimum period of 40 minutes and recorded on audiotape. The interviews included the obstetric history, perceptions about the roles and functions of carers, preferences for staff, perceptions of staff, continuity of carers, previous experience of maternity carers and socio demographic details.

Five hundred and fifty seven women were approached to complete the screening questionnaires. There were 20 women who refused to participate, resulting in a response rate of 96.4%. From the 537 women who completed the screening questionnaire, 290 (54%) were either not available when the
interviewer called, did not wish to take part in the interview or did not rearrange a cancelled appointment. The remaining 247 women who agreed for a follow up interview tended to be older women living in the more affluent areas.

Their findings revealed that fifty seven percent (57.1%) identified the midwife as the person delivering babies, 48% mentioned the midwife's role in postnatal care of the mother and baby, 54.7% related midwives to giving information, advice about pregnancy and childbirth, 53% referred to midwives providing emotional and psychological support and 7.3% of respondents said the did not know the role of the midwife. Six point nine percent (6.9%) believed that general practitioners delivered babies and or provided care in labour and 14.2% believed it was the role of the obstetrician.

Their findings also revealed that most of the women were able to identify the roles of midwives, general practitioners and hospital doctors in relation to the provision of maternity care. The women were less specific in describing the sorts of tasks performed by midwives and other staff. Some examples of these tasks are carrying out a breech, forceps and ventouse (suction) delivery and giving advice on maternity benefits. Leach et al (1998) stated that women were most likely to define the midwives' role by the clinical tasks that they perform. The examples include checking blood pressure, checking growth of the baby and delivery of a baby.
The researchers advised that there are limitations to this study which need to be considered in the interpretation of findings. The sample bias may have affected the results because the women living in the more affluent areas were over represented in the interview sample therefore, the findings may not be generalized to the wider population.

Leach et al (1998) suggested that a summary package providing information on the respective roles of maternity care staff might serve as a useful addition to information given to the women at the antenatal ‘booking in’ visit. This would allow and assist the women to make informed choices regarding maternity care.

3.3. Women’s expectations of the midwife

Leach et al’s (1998) study investigated pregnant women’s perceptions of maternity carers and Luanaigh (1995) specifically sought first time pregnant women’s perceptions about the midwives’ role. How do pregnant women perceive the midwife? What do they expect from a midwife? Luanaigh’s (1995) quantitative study conducted at Princess Ann Hospital in Southampton, England aimed at exploring women’s expectations, knowledge and misconceptions regarding midwifery services. Princess Ann’s Hospital in Southampton conducted approximately 5500 – 6000 deliveries per year and maternity services were provided by midwifery teams, general practitioners or obstetric consultants.
Women who were pregnant for the first time (primigravida) were selected for the study. Luanaigh (1995) explained that by selecting primigravidas, the chances of external influences were eliminated and the women’s knowledge of maternity services would be limited. Questionnaires devised to ascertain women’s knowledge of the midwifery profession and maternity services were distributed to 120 recruits at their booking in appointments. The final sample size was 54 respondents, that is, a response rate of 47.5%. Luanaigh (1995) postulated that although the sample was small, the results were noteworthy.

Luanaigh (1995) reported that 82% (44 women) respondents stated that midwives were named as the health professionals who deliver babies. Midwives were identified as specialist nurses, only one of the 54 respondents thought midwives were not nurses. Luanaigh (1995) stated that one of the clear themes that emerged from this study was that a majority of the women thought midwives provided maternity care throughout pregnancy and expected to be supported by a friendly, approachable and experienced midwife.

3.4. Midwives’ perceptions of the role and practise of the nurse-midwife

Women perceived midwives to be the health professionals trained and qualified predominantly to provide maternity care and deliver babies (Leach et al, 1998 and Luanaigh, 1995). Conversely, how do midwives perceive their roles in relation to maternity care and their responsibilities towards the childbearing women?
In the United States of America, a survey was conducted with the aim of identifying the contemporary scope of American Nurse Midwifery practise in USA (Fullerton, 1994). A stratified sample of 825 randomly selected certified nurse–midwives (CNMs) were recruited.

The findings from this report revealed a common theme. The nurse–midwife as the primary care provider was identified as the central role of the midwife. Fullerton (1994) commented that this is consistent with the ACNMs statement on the role of the CNM as a primary care provider. In this report, there were suggestions given by the respondents that the role of the primary care provider should be extended to include care of the newborn and menopausal women.

There were comments from the respondents that technological advances should not distract the nurse-midwives from losing their connection with non-intensive aspects of care. Concerns were also expressed by the respondents the nurse-midwifery educational program may not adequately prepare students to assume the responsibilities of a nurse-midwife. There were suggestions to incorporate health policy and business management subjects in the midwifery educational programs in order to adequately prepare nurse-midwives for management positions.

Fullerton (1994) stated that the findings from this survey had highlighted the prevailing role conflict among the nurse-midwifery profession. The nurse-
midwives had wide ranging opinions on what their role should encompass. There were nurse-midwives who suggested that the midwifery role should include paediatric and gynaecological care beside maternity care. Fullerton (1994) added that the comments in this survey report serve to provide an opportunity for further discussion and debate on the issues that were highlighted by the survey.

3.5. Multidisciplinary team's perceptions of the role of a midwife

Sledzik (1991) in Australia reported on a ‘similar’ study that was conducted in Australia to investigate the perceived characteristics of the midwife’s role in maternity care. The research was aimed at obtaining greater understanding of the midwives’ role, the midwives’ role effectiveness, current dilemmas of midwifery practise and the implications of the findings for future midwifery curricula. In 1991 this research report was presented at the Second National Midwifery Forum in Australia.

The research method involved in depth structured interviews. The interviews were taped after receiving consent from the subjects. Sledzik (1991) stated that grounded theory approach was used for data analysis.

The subjects were divided into four (4) groups. They were the mothers, midwives, nurses and obstetricians. There were 36 subjects in each of these groups. The subjects were recruited from 6 specific clinical areas. They are the high, medium and low technology midwifery institutions, birth centers, alternative birth centers and home birth centers. The high technology
midwifery institutions are institutions with an obstetrical medical orientation. The medium, low and birth centers are situated within a hospital. Alternative birth centers are not situated in a hospital and the home birth centers are in the home environment. The sample selection from these clinical areas were selected based on the premise that the characteristics of the midwives are recognised through their styles of practise.

The findings from this study revealed that the women and obstetricians were most specific in describing the role of the midwife. The midwives were the least specific in describing the midwifery role. Obstetricians regarded midwives as colleagues (Sledzik, 1991; Hadley, 1990; Wiegers, van der Zee & Keirse, 1998 and van Teijlingen & McCaffery, 1987). However, the general nurses viewed midwives from a competitive and rival perspective.

Caring was one of the major themes used to describe the characteristics of the midwife. In this caring theme, there were adjectives such as respectful, non-intrusive, reassuring and trusting. Sensitivity and being intuitive were also themes used to describe the midwife's role. Sensitivity was a characteristic that was highly valued by the woman and midwife. The findings also revealed that midwives have a commendable professional knowledge of midwifery and they are a part of the health care team caring for the childbearing woman. Bluff and Holloway (1994) had similar findings in their study.

The special relationship between the woman and midwife was regarded as unique and valued by the women and obstetricians. Attributing factors for the
development of this relationship were recognised as the continuity of care in labour provided by the midwife. The midwives were acknowledged as warm competent people and this is consistent with the findings by Bluff and Holloway (1994) and McCrea and Crute (1991). Some of the obstetricians in this research emphasised that it was important for the mothers in labour that midwives are their first contacts (Sledzik, 1991).

Sledzik (1991) stated that there were areas of concern highlighted in this research. Conflicting advice was given to mothers, the midwives had ‘fixed ideas’ regarding maternity care, and there was reported lack of adaptability and flexibility by the midwives.

Sledzik (1991) stated that there were several important educational implications from findings of this research. They are the concept of midwives caring for each other; developing a trusting collegial relationship with the obstetricians and nurses; enhancing midwives’ perception of their role and publicising this perception and role to the public (Leach et al, 1998 and Ong, Lim & Sabapathy, 1997); dealing with conflicting advice given to mothers; making contributions to professional literature which are conducive to improving and fostering the public image of the midwifery profession; and encouraging midwifery research by midwives.

3.6. **The relationship between the midwife and the clients**

The special relationship between the midwife and the clients is unique and valued by the women (Sledzik, 1991). McCrea and Crute (1991) conducted a
A qualitative study in Ireland to explore midwives' understanding of the influences which may affect the development of therapeutic relationships between midwives and their clients. The focus of their study was to identify those relationships which had a major impact on the midwives. The researchers explained that by concentrating on the therapeutic and non-therapeutic relationships they believed that the factors which were most likely to influence the relationship between the midwife and client could be identified. The study focussed on the midwives' opinions, feelings and attitudes in relationships between midwives and their clients.

A volunteer sample of 16 midwives was recruited at ward sister or staff midwives grade. There were four main issues identified in the findings from this study. They are the value and nature of the role of midwives; the acknowledgment of the midwives' authority and autonomy in practicing this role; the emotional involvement of the midwife with their client and the midwives maintaining their personal integrity.

Dilemma analysis was used to analyse the data. Their study revealed that if midwives were able to successfully manage these four issues, the outcome was a 'special' and therapeutic relationship between the midwives and clients. However, mismanagement of these issues inhibited the development of this positive relationship.

The researchers commented that the qualitative aspects of the research were appropriate at that exploratory stage, gathering in-depth views from the
sample. The acknowledged limitations of the study were that the data were gathered from a small sample in a single hospital and further research would be required to determine the extent of the generalisability of the findings to other midwives and institutions. They further commented that a quantitative methodology with a questionnaire based on the qualitative data from this study, could be used to expand the investigations on the relationship between midwives and their clients.

McCrea (1993) explained that the findings by McCrea and Crute (1991), indicate that midwifery education, practise and organisational issues are crucial for the development of a therapeutic relationship between the midwife and client. Recommendations are made for further research to determine the extent to which the findings could be generalized to other midwives in different institutional settings (McCrea, 1993).

3.7. Women's belief in a midwife's knowledge

The midwife's knowledge has been identified as crucially important to develop and foster a therapeutic relationship between the midwife and clients (Sledzik, 1991; McCrea & Crute, 1991 and McCrea, 1993).

Bluff and Holloway's (1994) qualitative study aimed to examine women's experience of labour and the birth of their baby; with the primary focus on the perspectives of the participants, whilst McCrea and Crute's (1991) study was focussed on the midwife's perspectives. The purposive sample of 11 women
volunteers was recruited from a maternity unit in a general hospital in the south of England.

Data for this study was obtained from unstructured, tape recorded interviews which, the researcher explained, provided the opportunity for the participants to express their thoughts and feelings. Grounded theory was used to analyse the data.

The findings from the study revealed that the participants and their partners accept the knowledge and competence of the midwives. This acceptance placed the midwives in a position of authority to make decisions about drugs, procedures and types of care. Furthermore, the women and their partners acknowledged that the midwives knew what was best for them. The study also revealed that the women wanted an involvement in the type of care they received, but may not necessarily be able to communicate these needs.

Bluff and Holloway (1994) stated that their study demonstrated that women trust midwives because midwives were perceived to be experts who ‘know best’. They added that these women placed themselves in the hands of the midwives to make decisions about drugs, procedures and the types of maternity care and that there was a need for flexibility between the midwives and the women in labour. Bluff and Holloway (1994) further explained that this belief in the professionals’ expertise and the women’s desire to play an active role in the partnership would impact on the type of relationship between the midwives and the women. This aspect of the findings is similar to those of
McCrea and Crute (1991)'s study regarding the factors which impact on the midwives' relationship with the women and their partners.

Bluff and Holloway (1994) acknowledged that the sample size was small and the findings may not be generalisable. However, they added that the study had revealed what really mattered to the women in labour. They noted that there was enough evidence to demonstrate what concerned women in labour and suggested that possibly the findings may be representative of a broader population.

In Singapore, Ong, Lim, and Sabapathy (1997) conducted a similar study to that of Bluff and Holloway (1994). Ong, Lim, and Sabapathy (1997) explained that the objective of their research was to explore the childbearing women's perceptions of the midwife's role in intrapartum care and delivery of the baby, and whether nursing behaviours influenced the childbearing experience. In a resulting article, the three midwives who had conducted this research reported their findings.

This qualitative research had a convenience sample of 20 married first time mothers (primigravidas) who had uncomplicated vaginal births. The subjects were approached on the third day after delivery of their babies.

Ong, Lim, and Sabapathy (1997) revealed that the predominant themes that had emerged from their interviews related to emotional, informational, tangible and social support from the midwives. The findings from this study revealed
that the women differed in their expectations of maternity care. Most of the women in the study felt a need to be booked in with an obstetrician, irrespective of their assurance of the midwives’ skills and competence. The authors suggested that this could be due to the women’s lack of information regarding the role of the midwife as experts in normal midwifery care.

Ong, Lim, and Sabapathy (1997) stated that it was necessary to publicise and educate the public regarding the role of the midwife and raise the profile and professional image of the midwife. These were similar observations and recommendations to those that were made by Leach et al (1998), that is, to publicise the role of the midwife and to provide informed choices regarding maternity care in low risk pregnancy.

The findings also revealed that a positive experience of childbirth is influenced by the midwifery care received from the midwives. These findings were similar to the findings by Bluff and Holloway (1994). The researchers stated that findings from this study might not be generalised to other populations. They explained that perceptions of this small sample of “willing” women who participated in this study could be different from the women who were unwilling to participate in the study. The researchers commented that the study serves to provide insights to midwives who are involved in the care of women in labour and may serve as a guide to midwives in the care of the women in labour.
3.8. Social changes and the impact on the midwife’s role

The perception of the women regarding the role of other health professionals providing maternity care affects perceptions of the role of the midwife. Robinson (1985) reported on a national survey of midwives and other health professionals in England and Wales. The survey was commissioned and funded by the Department of Health and Social Services (DHSS) and supported by the Royal College of Midwives (RCM).

The survey was commissioned partly due to concerns that certain aspects of the midwife’s role were being eroded by the increasing involvement of other health care personnel in maternity care and to ascertain the degree of this involvement, especially encroachment by the medical staff. The other reasons cited for this survey were to examine the role and responsibilities of the midwife and the development of a curriculum for midwifery training.

The survey was part of a two-stage project. A national survey of midwives and three groups of health professionals involved in providing maternity care were included. They were the health visitors, general practitioners and medical staff working in obstetrics.

Questionnaires were dispatched to these staff members in sixty (60) health authorities that were randomly selected from the fourteen (14) regional health authorities in England and Wales. Data were also collected from interviews with midwives. This included all the heads of the midwifery service from the sixty (60) authorities and a random selection of 74 midwifery sisters and staff
midwives in five of these districts. The response rates from the questionnaires were 78% from the midwives, 55% from the medical staff in obstetrics, 67% from the general practitioners and 89% from the health visitors.

Robinson (1985) found that the evidence in the survey data demonstrated that midwives were responsible for much of the maternity care given to childbearing women. The findings from this survey revealed that midwives were responsible for a significant proportion of antepartum, intrapartum and postpartum care provided for childbearing women and also much of the nursing care in special and neonatal intensive care units.

The main factor that was hindering midwives from fulfilling their roles was identified in the report. That is, the 'encroachment' or involvement of medical staff in normal maternity care minimized the midwife's autonomy in normal midwifery care, and limited some of the midwife's responsibility in this aspect of maternity care. The researcher mentioned that after completion of the survey, in some districts, the medical staff supported the midwives in establishing schemes to allow the midwives to provide maternity care for low risk pregnant women.

Fragmentation of care between staff groups, the shortage of midwives to cope with the demand of the work and midwives performing clerical duties were identified factors which were restricting opportunities for midwives to provide childbearing women with advice and support. On reflecting about the nurse-midwifery roles and functions in United States of America, Fullerton (1994)
discovered a common theme of nurse-midwives being primary care givers. She added that this role have been 'side tracked' by non midwifery related tasks, such as, technological encroachment on the midwives' duties, superfluous responsibility of dealing with system problems, insurance and inter disciplinary relationships (Fullerton, 1994).

3.9. Choice of midwife led maternity care

Robinson (1985) stated that midwives were responsible for much of the maternity care given to childbearing women, a significant portion of this care being provided in the antepartum, intrapartum and postpartum period. If women are fully aware of the role of the midwife in maternity care, they could then make informed choices regarding their pregnancy care.

A study was conducted in Australia to investigate the factors influencing women's support for midwifery-led maternity care in an Australian metropolitan area, the implications for the role of the midwife and the expanded choice of maternity care for childbearing women (Zadoroznyi, 2000).

Zadoroznyi (2000) explained that the study was conducted in two stages. In the first stage, a sample of 519 women was surveyed to examine their choice of maternity service provider and the location for the provision of the maternity service. The response rate was 61.7%. The second stage of the study involved in depth interview to gather birthing narratives, using a sample of 50
women randomly selected from the women involved in the first stage of the study.

The selection criteria for the participants involved in this study required that they be women who had given birth to a live baby in 1991 at one of the four hospitals in a metropolitan region in Adelaide, South Australia. They would have been living within or near this region.

Zadoroznyi (2000) stated that first time mothers were significantly disadvantaged in terms of choices of maternity care. This was due to the lack of information regarding midwife led maternity care and the women's main source of information regarding maternity care being acquired through the actual experience of midwifery-led care, particularly in giving birth.

The report elaborated that this lack of knowledge regarding the role of the midwife was due to the lack of information explaining what midwives are capable of doing. Zadoroznyi (2000) remarked that the work of midwives remained silenced and unnoticed by the women who were pregnant for the first time.

The findings reported on a positive appraisal and recognition of the role of the midwife. A majority of the women in the study indicated their choice for midwife led care for subsequent births. The findings also suggested that midwifery led care complemented by shared or back-up care with a general
practitioner or specialist obstetrician (in the event of pregnancy related problems) was more acceptable for the women.

Following this study, Zadoroznyi (2000) recommended the dissemination of information publicising the role of the midwife and the need for midwife led care. The lack of information regarding the work of the midwife and the need to publicise the role of the midwife was similarly voiced by Leach et al (1998) in the United Kingdom; Ong, Lim, and Sabapathy (1997) from Singapore and Sledzik (1991) in Australia.

3.10. Midwife, part of the maternity health care team

As mentioned in section 2.5.4., because of its excellent reputation, the Netherlands is often used as a baseline for comparisons on midwifery issues. In this section, the status of the midwife as part of the maternity health care team and the Dutch health care system is discussed.

An article by Hadley (1990) recounted her experience as a maternity patient in The Netherlands and gave an interesting insight into the Dutch maternity service. Hadley (1990) stated that in the western world, The Netherlands has one of the highest home birth rates and a consistently low perinatal mortality rate. This, Hadley (1990) commented, was due to several factors.

In The Netherlands, pregnancy and childbirth is considered a normal process. The midwifery training is directed towards independent practise. The midwives are specifically trained to provide maternity care for low risk
pregnant women and to appropriately refer these women to an obstetrician (specialist) if there are medical or obstetrical problems. These views are supported by the Dutch government, the community, medical and midwifery profession.

The independent status of the midwife clearly defined the role of the midwife as a professional maternity care provider. The Dutch midwives perceive a definite distinction between nursing and midwifery. This view was supported by the midwifery adviser at the Ministry of Health in The Hague. The midwifery adviser stated that there was no link between midwifery training and general nursing.

Hadley (1990) commented that in The Netherlands, the Cross Association is a home nursing service which provides nursing and home care to the community. As part of to the health care insurance, two thirds (2/3) of the Dutch families are members of the Cross Association, paying a nominal sum per year for membership. The rest of the Association’s funding is from the government’s social insurance scheme.

The pregnant women will 'book' a maternity nurse for the confinement period to assist with parenthood services. The maternity nurse receives 18 months training in obstetric nursing and care of mother and baby. These maternity nurses assist the midwives in providing care to the childbearing women.
The success of the home birth rate in The Netherlands is also attributed to the Dutch health service care. The Dutch government financially subsidizes normal maternity services provided by the midwife. If the pregnant woman chooses to be booked for maternity care by an obstetrician or general practitioner in the absence of pregnancy related problems, then the pregnant woman will have to honour the medical fees herself. However, if a referral to an obstetrician was initiated by a midwife due to pregnancy related or medical problems, the cost of specialist service will be met by the government.

However, in Australia, 50% of women have some form of private health care insurance for childbirth, enabling them to choose an obstetrician for their maternity care or private hospital of their choice (section 2.5.6.2). The majority of midwives work in a hospital (King, 1993; White, 1999) and a small percentage of midwives choose to practice independently, attending to homebirths (White, 1999).

Wiegers, van der Zee, and Keirse (1998) echoed the views expressed by Hadley (1990) pertaining to the high percentage of home births and low perinatal mortality rate in The Netherlands. In an article discussing their investigation of the maternity care service and changing home birth rate in The Netherlands, Wiegers, van der Zee, and Keirse (1998) commented that the Dutch maternity care has received significant attention because of the high home rate and low medical intervention rate compared with other industrialised nations. They propose that the factors contributing to the success of the Dutch maternity service included the special position and
specific training of midwives for independent practise; the availability of
maternity care assistants (maternity nurses); the collegial relationship
between the midwives and the medical profession; the unique health and
social structure of the Dutch maternity care; and the perception that
pregnancy and childbirth are normal processes that do not require medical
intervention unless it is necessary.

Wiegers, van der Zee, and Keirse (1998) investigated the Dutch maternity
care service between 1965 and the early 80’s. They noted that there was a
decline in the home birth rate from 68.5% in 1965 to 35.8% in 1978. The
decline plateaued between 1978 and 1988. After 1988, the home birth rate
started to decline further, which potentially destabilized the maternity care
service and the role of the midwife in The Netherlands. Wiegers, van der Zee,
and Keirse (1998) discovered that the factors contributing to this occurrence
included visiting rights being given to midwives to deliver babies in hospitals;
introduction of short stay hospital birth; increased referral to specialist care;
demographic changes; and an increase in medical and reproductive
technology. They commented that the choices for home or hospital births
were influenced by previous experience of childbirth and the perceived
preferences and experiences of significant others, that is, partner, family or
friends.

The recommendation given by Wiegers, van der Zee, and Keirse (1998) to
maintain the unique success of the Dutch maternity service and high standard
of home births, was to encourage the low risk pregnant woman to have
Van Teijlingen and McCaffery (1987) expressed their views on the independent status of the community midwife in The Netherlands and shared their acclamation of the Dutch maternity service. They identified the same attributes, which were highlighted by Hadley (1990) and by Weigers, van der Zee, and Keirse (1998) that had placed the Dutch maternity service at a unique and enviable position.

The community midwife is a prominent figure in the Dutch maternity service and they have a greater professional autonomy than their counterparts in most countries. Van Teijlingen and McCaffery (1987) compared the similarities and differences between the Dutch and British midwives.

Van Teijlingen and McCaffery (1987) remarked that the Dutch health system allows normal deliveries to be conducted in the home or hospital, according to the preferences of the woman. The midwives conduct over 40% of deliveries, a large percentage of these were conducted in the woman's home and a smaller number in the hospital (as short stay hospital births). The Domino scheme in Britain is comparable to the Dutch system. That is, the midwife in this Scheme provides antenatal care and conducts deliveries in the home or hospital (as short stay hospital births).
The Dutch midwives are different from the British midwives as they are not nurses. The Dutch direct entry training is channeled towards pregnancy and childbirth, the recognition of risk factors during care and appropriate referral for specialist or obstetrical care. The midwives in The Netherlands have a legal obligation to identify and refer the pregnant woman if there are any deviations from the normal pregnancy. The midwives continue to retain full responsibility for all women with normal pregnancies, therefore, maintaining continuity of care. In the opinion of the Dutch midwives, pregnancies are normal processes unless there are indications that suggest the presence of complications relating to pregnancies. However, in Britain, pregnancy is considered to be potentially dangerous (van Teijlingen & McCaffery, 1987) and it is only normal in retrospect. There is a formal selection process to identify low risk pregnant woman for the Domino scheme in the United Kingdom.

3.11. Midwife, Nurse and Traditional Birth Attendants

In an editorial comment on the definition of nurse-midwife, Kraus (1997) highlighted the definitions of a midwife and traditional birth attendants (TBA), and their relevant role and functions. Kraus (1997) stated that "midwives...do not have to be nurses" (p. 69). She added that whilst many members of the American College of Nurse-Midwives (ACNM) recognised nursing as a prerequisite for midwifery education, she believed it is the midwifery educational curricula that prepares midwives and not their nursing education.
This investigator practises as a midwife in a health establishment which services a large multi-ethnic population. In the context of multi-cultural sensitivity, maternity liaison officers are employed to assist midwives to deliver maternity care that is culturally acceptable to the pregnant women from a relevant ethnic group. These maternity liaison officers are women from a specific ethnic group, for example, Chinese, Arabic or Vietnamese. They understand the specific culture of the pregnant women and provide support for the pregnant women and midwives attending to these women. The maternity liaison officers are not certified midwives.

Kraus (1997) highlighted the definitions of a midwife according to the International Confederation of Midwives (1990) and the traditional birth attendants (TBAs) according to the definition by the World Health Organisation (1992). Kraus (1997) commented that in the USA, there were different titles accorded to a midwife, for example, “nurse-midwife”, “licensed-midwife” and “lay midwife”. She added that these different titles could be confusing for the public. Midwives are professionally qualified and have a broader scope of practise in maternity care than traditional birth attendants. Whilst acknowledging that access to midwifery care remained limited in certain areas, the maternity care provided by traditional birth attendants only is not consistent with the international goal.

Kraus (1997) recommended and advised that it was necessary, in the USA, to adopt the two international definitions and titles, to define the profession of a midwife and to distinguish the role of a midwife from a TBA. In June 1996,
Kraus (1997) stated that the ACNM's definition of a midwife was brought into compliance with the international definition of a midwife. The ACNM register midwives who are also trained nurses and MANA has a register for professional trained midwives who are not trained nurses. Kraus (1997) acknowledged that many ACNM members recognised the usefulness of nursing as a pre requisite for midwifery education. However, she argued, that the international definition does not require midwives to be nurses.

As already discussed, the Dutch midwives see a distinct difference between nursing and midwifery (van Teijlingen & McCaffery, 1987; Hadley, 1990; Wiegers, van der Zee & Keirse, 1998; McKay, 1993). And in a report on the different models of care in Denmark, Sweden and the Netherlands, McKay (1993) gave a succinct insight into the health care organisation and the midwifery services provided in each system.

This article is a report of her observation of maternity services in four European countries with lower infant mortality rates than the United States. McKay (1993) stated that "midwifery is a central feature of obstetrical care in each of these three countries" (p.114).

McKay discussed the health care system, midwifery practice, infant mortality rates and the role of the midwife in the three countries. She concluded that midwives in these three countries are held in high esteem and are positioned as 'front line' care givers of normal pregnant and labouring women.
The Danish midwives are not nurses unless they have received their training in another country (nursing is not a prerequisite for midwifery training). In each country, McKay (1993) noted that midwives form the ‘front line’ providing care for normal pregnant women and were considered to have contributed to the excellent perinatal outcomes of these 3 countries.

3.12. Conclusion

This chapter explored research that has been conducted in relation to the childbearing women’s perceptions of the role of a midwife. At the commencement of this survey, it was noted that there were no studies conducted in Australia to specifically explore the childbearing women’s perceptions of the role of a midwife. It was noted in the literature review that most of the research and information exploring the midwifery role was from the United Kingdom and Ireland; with contributions from the USA and Singapore (Leach et al., 1998; Luanaigh, 1995; McCrea & Crute, 1991; McCrea, 1993; Ong, Lim & Sabapathy, 1997).

A partial replication of the research conducted by Leach et al (1998) was proposed in order to bridge the gap of knowledge in this area, in Australia. During the writing of this thesis, the investigator discovered two articles originating from Australia pertaining to the role of the midwife. One was a research report that was presented by Sledzik (1991) at a midwifery forum in Australia and the other a research article by Zadoroznyi published in year 2000 in ‘Midwifery’, a United Kingdom based midwifery journal. The study by Sledzik (1991) revealed that women and obstetricians were more specific
than the midwives in describing the role of a midwife. Zadoroznyi (2000) reported that there was a lack of knowledge regarding the role of a midwife. This was due to a lack of information explaining what midwives are capable of doing. She added that first time mothers were significantly disadvantaged in terms of choices of care due to this lack of information and knowledge.

In conclusion, most of the literature reviewed highlighted the contribution of the midwives as key personnel, with a unique and important position in the provision of childbirth care to pregnant women. In view of the findings discussed in the literature review, the investigator concluded that it is vital to investigate the childbearing women's perceptions of the role of a midwife in Australia. The literature review indicated a lack of information regarding the role of the midwife in Australia. This study is important to bridge this information gap and to understand women's needs for the presence of a doctor at the delivery of their babies. The participants for this study were recruited from the Western Sydney Health Area. The next chapter includes a background information on the Western Sydney Health Area and Westmead Hospital.
Chapter Four: Western Sydney Health Area

4.1. Introduction

This chapter introduces and provides background information on the Western Sydney Health Area and Westmead Hospital. The survey for this study was conducted at Westmead Hospital.

The Western Sydney Health Area’s population is relatively young in comparison to the rest of NSW. A greater proportion of the population in this Area is between 10 to 20 years old. In 1996, the number of childbearing women in the Western Sydney Health Area aged between 16 to 50 years was 168,518 (Australian Bureau of Statistics, 1996).

In this chapter, discussions include the demographic characteristics of the Western Sydney Health Area, models of midwifery care and the role of a midwife at Westmead Hospital. The Westmead Hospital Clinical Information System and the New South Wales Midwifery Data Collection and the dissemination of relevant information pertaining to live and stillbirths in NSW is included in this chapter. The background, aim and the purpose of the study are also presented in this chapter.
4.2. Brief description of Western Sydney Health Area (WSHA)

The Western Sydney Health Area stretches over seven hundred and fifty eight square kilometers. The area stretches from Lidcombe in the south western corner to Mt Druitt in the west and to the rural areas of Cattai, which is to the north of Parramatta. The ongoing urban development of western Sydney has created a great diversity of suburbs, varying in their history, ethnic composition and socio-economic status. Western Sydney Health Area is distinguishable from the rest of the state by virtue of the distinctive ethnic composition in this area (Meppem, 1990).
Western Sydney Health Area consists of five local government areas. They are Auburn, Baulkham Hills, Blacktown, Holroyd and Parramatta. There is an approximate population of 663,000 people living in these five local government areas (LGAs). The population is growing at a fast rate. The combined population exceeds South Australia (Westmead Hospital and Community Health Service Report, 1996). The report added that the Western Sydney Area Health Service provides primary and secondary health care for the people living in the five local government areas and tertiary care to the whole western region for an estimated population of 1.7 million people.

The highest population densities of the five local government areas are in the older established areas of Holroyd and Parramatta. This area boasts of a large commercial center in Parramatta, including a sports stadium and a large park for recreational purposes. Baulkham Hills Shire is comprised of residential and semi-rural areas with little high rise development. Auburn's residential population occupies 30% of the total area. Sixty five percent of the Auburn municipality is land zoned for industrial, Department of Defence and the Rookwood Cemetery. In Blacktown LGA, the major population growth is occurring in the 'new' residential areas of Parklea, Quakers Hill and Rouse Hill (Just Health in Western Sydney, 1992, cited in the Western Sydney Area Health Service annual report 1998 –1999).
4.2.1. Demographic characteristics

Figure 2 New South Wales Area Health Services

In Western Sydney Health Area, the population is relatively young in comparison to NSW as a whole. The greater proportion of the population is in the age group of 10 to 20 years with a slightly higher population between 45 to 60 years. The population over 65 years old was predicted to increase from 51,000 to 69,000 between 1991 and 2001 (Western Sydney Area Health Service Annual Report 1998 – 1999). In 1996, in the WSHA, there were 168,518 childbearing age women between the ages of 16 years to 50 years (Australian Bureau of Statistics, 1996).
Table 1 Number of childbearing age females in Local Government Areas of Western Sydney
(Australian Bureau of Statistics, 1996)

<table>
<thead>
<tr>
<th>Local government areas</th>
<th>Childbearing Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auburn</td>
<td>13,287</td>
</tr>
<tr>
<td>Baulkham Hills</td>
<td>32,887</td>
</tr>
<tr>
<td>Blacktown</td>
<td>63,958</td>
</tr>
<tr>
<td>Holroyd</td>
<td>21,479</td>
</tr>
<tr>
<td>Parramatta</td>
<td>36,907</td>
</tr>
<tr>
<td>Total</td>
<td>168,518</td>
</tr>
</tbody>
</table>

4.2.2. Ethnicity

In Western Sydney, there is a significant number of residents born in non-English speaking countries so this area has diverse ethnic groups with English as their second language. The Australian Bureau of Statistics (1996) reported that the number of residents born overseas was 203,378 and 160,649 of these residents were born in non-English speaking countries.

The percentage of the population that were born overseas is rated as follows: Auburn 48\%, Parramatta 28\%, Holroyd 27\%, Blacktown 23\% and Baulkham Hills 16\% (Australian Bureau of Statistics, 1996, cited in the Western Sydney Area Health Service Annual Report 1998 – 1999).

4.2.2.1. Aboriginal population

There were 7,686 Aboriginal or Torres Strait Islander people in Western Sydney Area Health Service in 1996 and 68\% of this lived in Blacktown. Forty percent (40\%) of the Aboriginal population was under the age of 25 years.
4.2.3. Socio-economic characteristics

The socio-economic status ranges from Baulkham Hills, which is in the top 10% in NSW to Parramatta and Holroyd, which occupies the bottom 25% of the State (Westmead Hospital and Community Services Report, 1996). The Western Sydney Area Health Service Annual Report 1998 – 1999 stated that, on the socio-economic advantage index Western Sydney is ranked above the NSW average, due to the high ranking of Baulkham Hills local government area. The people in Auburn and Blacktown LGAs rank in the bottom 40%, which are among the socially disadvantaged in NSW (Western Sydney Area Health Service Annual Report 1998 – 1999).

The following hospitals are part of the Western Sydney Area Health Service. They are Auburn Hospital and Community Health Service; Blacktown – Mt Druitt Hospital; Greater Parramatta Mental Health Service; Lottie Stewart Hospital and Westmead Hospital and Community Health Service.
Obstetric and midwifery health care services in this area are provided by 5 hospitals. They are Westmead Hospital; Blacktown Hospital; Auburn Hospital; Baulkham Hills Private Hospital, and the more recent addition of Westmead Private Hospital.
4.3. Westmead Hospital

Westmead Hospital is located in the western suburbs of Sydney, which is one of the fastest growing area of Sydney. It is a 760 bed teaching and tertiary referral hospital and is the largest hospital within the Western Sydney Area Health Service. Westmead Hospital is responsible for the primary and secondary health care for the residents of local areas of Parramatta, Holroyd and Baulkham Hills.

At Westmead Hospital, in the Women’s Health and Neonatal Care Department, there are health services available for the treatment of gynaecological conditions, fertility services, maternity and neonatal services for high and low risk patients during their pregnancy, delivery and postnatal period (Westmead Hospital and Community Health Services, 1996). In preparation for childbirth and parenting, antenatal and childbirth education are provided by the midwives in evening and day classes for pregnant women and their partners. A community service is available for women living the WSAHS for early discharge from the hospital and postpartum and follow up care to be continued by midwives employed by Westmead Hospital. Women who choose to have their babies at Westmead Hospital have the options of various models of maternity care offered by this hospital (refer to section 4.4).
4.3.1. The structure of the Obstetric and Gynaecology Department at Westmead Hospital

The Women’s Health and Neonatal Care Department of Westmead Hospital is comprised of the maternity unit, neonatal care facilities, gynaecology and oncology unit.

Figure 4 Structure of the Obstetric and Gynaecology Department at Westmead Hospital

4.3.1.1. Maternity Unit

4.3.1.1.1. The Antenatal Clinic (University Clinic)

The antenatal clinic provides outpatient antenatal care from Monday to Thursday. Booking in of all pregnant women is conducted on Fridays by the midwives in the University Clinic. There are 8 to 10 single (private) rooms available and used for antenatal visits and booking in interviews.
4.3.1.1.2. The Antenatal Ward

The Antenatal ward has 29 beds for high risk pregnant women who require inpatient or close surveillance of their pregnancy due to obstetric or pregnancy related problems.

4.3.1.1.3. Delivery Suite

There are 18 beds in the Delivery Suite. The 10 delivery rooms offer the women privacy and a safe environment for the delivery of their babies. The two assessment rooms are utilised to assess women who have come to the Delivery Suite with various presenting problems, for example, early labour, reduced fetal movement for cardiotocograph tracing (CTG), other related medical or obstetric problems. There are 2 two bedded rooms with facilities for antenatal and postnatal observation. A special single room for high dependency care is provided for ongoing high-risk women in the antenatal or postnatal period, for example for those with severe pre eclampsia or severe postpartum hemorrhage.

4.3.1.1.4. Postnatal Ward

The Postnatal ward has 57 beds for postpartum care. The postpartum women are admitted to the postnatal ward to recuperate after the birth of the baby. Besides resting in hospital after the delivery of their babies, the women and their partners are taught basic parenting skills and educated in postnatal care by the midwives. These parenting skills are assessed, supervised and
encouraged. Follow up care by the Westmead Hospital Community Midwife
could be arranged if the women choose to have an early discharge from the
hospital.

4.3.1.2. The Neonatal Care Facilities

Within the Women's Health and Neonatal Care Department, there are
facilities for low, moderate and high risk births and a level 3 neonatal intensive
care unit that provides high dependency specialist nursing and medical care

4.3.1.2.1. Neonatal Intensive Care Unit

The neonatal Intensive Care Unit is a level 3 unit with 27 cots, providing
intensive care for neonatal and premature babies. The NSW Public Health
Bulletin Supplement (1998) defined a tertiary level three Neonatal Intensive
Care Unit (NICU) as "a unit that provides high dependency specialist nursing
and medical care for all newborn infants including sustained "life support"
such as mechanical ventilation and has staff neonatologists and neonatal
registrars." (p. 15).

4.3.1.2.2. Special Care Baby Unit

Special Care Baby Unit (SCBU) is a 20 cot unit with facilities for close
monitoring and specialised neonatal care. Neonates who do not require
intensive care but needing close observation would be monitored and cared
for in the special baby care unit. Some examples include, monitoring of blood
glucose level of babies born of diabetic mothers, babies of drug dependent
mothers who require close observation during drug withdrawal, premature babies born after 34 weeks' gestation and not requiring intensive care and babies with congenital malformations such as cleft palate and lip, requiring supervision and assistance with oral feeding.

4.3.1.3. Gynaecology and Oncology Unit

The Gynaecology and Oncology ward has 25 beds. This ward provides facilities for various gynaecological and oncological problems. Care is given by registered nurses who are employed to work in this area. Following gynaecological surgeries, patients who require chemotherapy or radiotherapy may be cared for in this unit or alternatively, transferred to a medical ward for ongoing oncological care if a gynaecological bed is required for another gynaecology patient.

4.4. Models of maternity care at Westmead Hospital

*Figure 5 Models of maternity care*

![Diagram of models of maternity care]

- Models of maternity care
  - Midwife's Clinic
  - General Practitioner (GP) shared care
  - Private care by an obstetric consultant
  - Team Midwifery Program (TMP)
  - Obstetric Consultant Care
At Westmead Hospital, there are different models of maternity care. They are the Midwife's Clinic (Midwife's Care); Team Midwifery Program (TMP) care; General practitioner (GP) shared care; Obstetric Consultant Care; and Private care by a consultant. The pregnant woman at 'booking in' (with the exception of women who are booked for private care by a consultant of their choice), is briefed regarding the different options and models of care that are available at Westmead Hospital.

4.4.1. Midwife's Clinic

The midwife’s clinic was commenced in 1989, initiated by the midwives at Westmead Hospital with the full support of the obstetricians. A pregnant woman in the ‘low risk’ category, that is, without predisposing medical or obstetrical problems or history, may have antenatal care by a midwife. At the first antenatal visit, which occurs at 12 to 16 weeks gestation, the obstetric registrar will assess the pregnant woman. In the absence of perceived obstetrical or medical problems, the pregnant woman may be placed in the midwife’s clinic.

In the midwife’s clinic, midwives in the antenatal clinic are nominated to ‘follow through’ and provide antenatal care to the pregnant woman. Each midwife will have their individual clinic. There could be five to six midwife’s clinics a week. These antenatal clinics are held every day. There are morning and afternoon sessions.
A midwife has approximately 15 pregnant women at each midwifery clinic session. At each antenatal visit, the pregnant woman will be checked or attended by the same midwife. The fundamental rationale for a midwife's clinic is to provide a consistency and continuity of care by the same midwife all through the pregnant woman's pregnancy.

The midwife will monitor the progress of her pregnancy, growth of the fetus, give antenatal advice, for example rest, diet, exercise, parenthood classes and attend to any questions or assistance required by the pregnant woman. The midwife uses a chart as a guideline and a checklist (Appendix 1) to assist in monitoring the antenatal advice given to the pregnant woman at each antenatal visit.

In the absence of any problems, the woman will be reviewed at 32, 36 and 40 weeks' gestation by an obstetric registrar, as part of this model of antenatal care. If there are obstetric or medical problems, the midwife will consult the obstetric registrar or obstetric consultant. The ongoing antenatal care of this woman may be transferred for consultant care if the obstetric or medical problem persist. If not, the midwife will continue to deliver antenatal care.

4.4.2. Team Midwifery Program (TMP)

The Team Midwifery Program was a project initiated at Westmead Hospital in September 1992 in response to the Shearman Report (1989), a ministerial report on Obstetric Services in New South Wales (NSW), (Westmead Hospital Team Midwifery Project Evaluation, 1994). There were several
recommendations in relation to the obstetric services in NSW. One was the need to increase the utilisation of midwives in providing maternity care and the continuity of care of woman during childbirth.

The philosophy of the Team Midwifery Program at Westmead Hospital is to provide continuity of care during pregnancy, birth and the postnatal period by a midwife. This would also ensure that the woman receives care during labour by a midwife that she has met prior to the onset of labour.

The midwives in the Team Midwifery Program are responsible for providing care to the pregnant woman in the antenatal, intrapartal and postpartal period. There are six midwives in the Team Midwifery Program, taking on a case load of 32 to 36 patients per month, that is, an average of 6 patients per midwife per month (Westmead Hospital Team Midwifery Project Evaluation, 1994). The ‘format’ of antenatal care is similar to the woman booked with the midwife’s clinic. The only difference is that the midwife in this Program follows the woman throughout labour and the postpartum period. The woman booked with the midwife’s clinic will be cared for by a midwife in delivery suite and another midwife in the postnatal ward, in the postpartum period.

At Westmead Hospital, the Team Midwifery Program project was piloted and trialled in 1992 and the final report was presented in 1994. The project was successful and this model of care was continued and this model of care is currently available at Westmead Hospital.
4.4.3. General Practitioner (GP) shared care

The pregnant woman who elects to have general practitioner shared care will be booked in at Westmead Hospital at 10 to 12 weeks’ gestation. The criteria for this model of care is similar to the prerequisites for midwife’s care and Team Midwifery Program.

Antenatal care is provided by the general practitioner until 32 weeks' gestation. At 32, 36 and 40 weeks' gestation gestation, the pregnant woman is required to attend the antenatal clinic at Westmead Hospital. The woman is reviewed and assessed by an obstetric registrar or a resident doctor under the supervision of an obstetric consultant in the antenatal clinic. Ongoing antenatal care will be continued by the general practitioner in the absence of medical or obstetric problems.

4.4.4. Obstetric consultant care

The pregnant woman with a medical or obstetric problem requiring close supervision or monitoring during the antenatal period will be placed under the obstetric consultant care. The woman will attended by an obstetric registrar or obstetric consultant at each antenatal visit.

In the intrapartum period, the woman will be cared for by a midwife and an obstetric registrar in the delivery suite. In the event of any problems arising during the woman’s labour, the consultant on call for the delivery suite will be
consulted regarding the management in labour. Postnatal care will be provided by the midwives in the postnatal ward.

4.4.5. Private care by an obstetric consultant

A pregnant woman with private health care cover has the option of choosing an obstetric consultant to provide childbirth care. The woman will book in at 10 to 12 weeks’ gestation at Westmead Hospital, and attend antenatal visits with the private obstetric consultant in the private consultant’s room.

During the intrapartum period, care in labour will be provided by the midwife under the supervision of the consultant. The delivery of the baby will be attended by the obstetric consultant. Postnatal care in the postnatal ward will be provided by the midwives in the postnatal ward.

4.5. Role of the midwife at Westmead Hospital

A thorough description of the role of the midwife and midwifery service at Westmead Hospital is given so that readers can see the context from which the sample is drawn and the environment in which the study is conducted. Though this model at Westmead Hospital is one service where midwifery care can be delivered, midwives at Westmead Hospital undertake regular patient audits and feedback from patients. These unpublished ward audits and feedbacks is one avenue used by midwives to enhance or improve midwifery care and services.
At Westmead Hospital, the maternity section of the Women's Health and Neonatal Care Department comprises of an antenatal clinic (University Clinic), a delivery suite (labour ward), an antenatal ward and postnatal ward. Westmead Hospital is a teaching hospital. Student midwives from the University of Technology, Sydney and the University of Western Sydney consolidate their midwifery education by acquiring and practicing their clinical skills and knowledge at Westmead Hospital. All student midwives are supervised and preceptored by senior midwives or clinical midwifery specialist in the clinical areas. Similarly, medical students from the University of Sydney are supervised by senior or clinical midwifery specialists during their placements in the maternity department.

Midwives are employed by the WSAHS, to provide maternity care to all maternity patients, irrespective of their private or clinic hospital classification. In the event of a deficiency of midwives, registered nurses from nursing agencies are contracted to work in the maternity department for midwifery deficient shifts. The registered nurses are supervised and assisted by the certified midwives in the provision of maternity care.

The core aspect of the midwife's role at Westmead Hospital involves monitoring the progress of pregnancy, fetal and maternal well being, providing information, counseling, advising and teaching, facilitating and supporting in all aspects of maternity care. The 'specific' roles of the midwife vary to a minor degree between the different units. For example, the midwife in the antenatal clinic attends mainly to antenatal care and pregnancy related issues during
the patient’s antenatal visits on an outpatient basis, whilst the midwife in delivery suite is predominantly involved with intrapartum care.

4.5.1 Antenatal clinic

In the antenatal clinic, the midwife attends to the midwife’s clinic or works with the medical team in the consultant’s room, providing support for the medical team and pregnant woman. The midwives in the antenatal clinic utilize a set of guidelines outlined in Appendix 1, to assist in providing consistent and appropriate information regarding maternity care at each antenatal visit. The midwife answers queries relating to maternity care or any other issues that the woman may have. Education of the pregnant woman, for example, about diet (especially a diabetic patient), raised blood pressure, personal hygiene and exercise are provided by the clinic midwife.

The midwife is also involved in facilitating clinic visits as appropriate, that is, ensuring that the patient is seen by the appropriate obstetric medical personnel and fetal heart rate monitoring is attended. The role of the midwife in the antenatal clinic also includes telephone assessment, counseling, taking pap smears, giving follow up care after a spontaneous miscarriage, answering enquiries relating to pregnancy and checking on investigative results, such as, blood and urine specimen results. Therefore, the role of the midwife in the antenatal clinic is specifically related to outpatient care and providing a supportive role in educating, counseling, advising and informing pregnant women.
4.5.2. Antenatal Ward

The role of the midwife in the antenatal ward is similar to the role of the midwife in the antenatal clinic. The midwife in the antenatal ward provides ongoing inpatient antenatal care to pregnant women (irrespective of hospital classification) that have been admitted to the hospital.

The category of women admitted to the antenatal ward ranges from women with high blood pressure who have been admitted for rest, diabetic patients admitted for stabilisation of their blood glucose level and women in premature labour to patients with fetal abnormalities for termination of pregnancy and fetal death in-utero at different stages of pregnancy.

Education, teaching, counseling, support and antenatal assessment are major roles of the midwife in the antenatal ward. Women who have been admitted to the antenatal ward would be informed and counseled regarding the importance of their admission for inpatient care. For example, a diabetic woman that was admitted for stabilisation of glucose level. The midwife would explain the importance of her admission to the ward and be involved in educating, counseling and supporting the patient regarding the importance of a diabetic diet, correct administration of insulin, monitoring blood glucose levels and monitoring the well being of the fetus.

A pregnant woman with fetal abnormalities or fetal death in-utero (and admitted for termination of pregnancy) requires enormous support and
counseling from the midwifery staff. The midwife would also initiate referral to the appropriate health personnel to provide ongoing care to the woman. Therefore, the role of the midwife in the antenatal ward is similar to the role of the midwife in the antenatal clinic with antenatal care provided on an inpatient basis.

4.5.3. Delivery Suite

The role of the midwife in delivery suite incorporates all the roles of the midwife in the antenatal clinic and antenatal ward. In delivery suite, the role of the midwife is predominantly involved in providing intrapartum care and delivery of the baby. The midwife in delivery suite provides care to all patients, irrespective of the woman’s hospital classification. A woman who has booked as a clinic patient will have her baby delivered by a certified midwife or a midwifery or medical student under the supervision of a certified midwife. A woman who is privately booked with an obstetrician will be cared for by a midwife and the obstetrician would be notified to attend to the delivery at the appropriate time.

The midwife in delivery suite attends to all telephone assessments. Telephone assessments include questions regarding early labour, infant feeding, medications in pregnancy, exposure to neighbours or friends with infectious diseases like chicken pox or measles, and any issues relating to pregnancy or the baby.
The midwife in delivery suite also provides triage and after hours assessment of pregnancy related problems. For example, assessment of early labour, checking fetal well being in the absence of or reduced fetal movements, unspecified bleeding in pregnancy and various pregnancy related problems.

Short term antenatal care is provided by the midwife and the obstetric team in delivery suite. For example, a woman with threatened premature labour in the acute phase, severe hypertension requiring treatment and close observation or antepartum haemorrhage requiring close monitoring; are all observed in delivery suite. When the condition of the woman is deemed to be stable, arrangements would be made to transfer the woman to the antenatal ward for ongoing close supervision and observation. The midwife is involved in providing tertiary level care and a support system for the woman and her family.

A low risk pregnant woman (clinic patient) in labour is managed by the midwife. In the event of any complications, the midwife would consult with the obstetric registrar. A high risk pregnant woman is managed in collegial partnership with the obstetric and midwifery team. If the high risk pregnant woman presents no problems in labour or delivery, the midwife would continue with midwifery care and will consult with the obstetric registrar if any problems arise. For private patients, the midwife will directly consult with the relevant obstetric consultant.
In the immediate postpartum period, the woman is assisted with the initiation of neonatal feeding (breast or bottle feeding) as preferred by the woman. A brief discussion regarding parenting skills, personal hygiene, rest and diet is initiated. The postpartum woman is observed in delivery suite for a period of approximately two hours post delivery of the baby prior to transfer to the postnatal ward. If there are any problems in the postpartum period, for example, postpartum haemorrhage, the woman would be observed in delivery suite by the midwife until her condition is stable and suitable for transfer to the postnatal ward.

In the event of an operative delivery (caesarean section) the midwife from delivery suite will attend to the baby in operating suite, transferring the baby to delivery suite for neonatal assessment. The midwife will continue to provide and support for the woman’s family and care of the baby.

4.5.4 Postnatal Ward

In the postnatal ward, the midwife is primarily involved with postpartum care. This role involves educating, supporting, counseling, teaching and advising the woman and her family regarding postnatal issues and care of baby. This involves educating and teaching the woman and her partner parenting skills. The midwife attends postnatal assessment daily to ensure mother and baby’s well being, provides support in infant care, counsels the woman in all aspects of parenting skills and arranges appropriate referrals to other health care personnel like a community midwife, social worker or breast feeding consultant.
The midwife will discuss neonatal immunisation, health clinic facilities in the community, the postpartum check up (6 weeks after the delivery of the baby) with the general practitioner, pap smears and any questions that the woman may have prior to discharge from the hospital. The neonatal immunisation, such as Hepatitis B vaccination, is commenced by the postnatal ward midwife. Neonatal screening tests like the Guthries’s test are attended by the midwife. The Guthrie’s test is a metabolic screening test to detect a block of protein called phenylalanine. A deficient amount of this protein, if not treated early, will lead to a condition called phenylketonuria (PKU), resulting in mental retardation of the infant.

This screening test involves pricking the infant’s heel and obtaining 3 to 4 drops of blood on the Guthrie’s screening test blotting card. This test is usually performed 4 to 7 days post delivery. The minimum requirement for this test is that the infant must have been fed for at least 24 hours (that is, the infant must at least be one day old). If not, the test would not be accurate (Varney, 1997). It is the midwife's role and responsibility to ensure that this test is performed.

4.5.5. Community Midwife

A woman who has elected to be discharge home early (for example after 24 hours to 48 hours after delivery of the baby) will be followed up by the community midwife. The community midwife provides similar care to that
provided by the midwife in the postnatal area. The difference is that the care is given in the woman’s home (in the community).

4.5.6. Summary of midwifery care at Westmead Hospital

In summary, the specific role of the midwife at Westmead Hospital varies to minor degrees. This is dependent on the maternity area where the midwife is providing care. That is, in a postnatal ward, the midwife is more involved with postnatal care, parenthood education and providing a supportive role in caring for the newborn infant. The fundamental responsibility of a midwife is to provide a holistic maternity care encompassing an educational, advisory, counseling and supportive role to all pregnant women, irrespective of hospital classification.

All midwives at Westmead Hospital take turns to rotate to different clinical areas, at four monthly intervals for junior midwives and at two yearly intervals if they are senior midwives. This is to maintain the midwives’ comprehensive and extensive skills and knowledge in all different aspects of midwifery care. However, a core group of clinical midwifery specialist and more senior midwives remain in their area of ‘specialty’ and fulfill the rotation requirements approximately every five years. Therefore, the diverse role of the midwife is practised in the different units/wards and a midwife’s role and practise is not exclusive to any particular unit/wards.
4.6. Data collection of live and still births in NSW

4.6.1. NSW Midwives Data Collection

All hospital based and home birth midwives in New South Wales are involved in collecting information concerning all live and stillbirths in NSW. The New South Wales Midwives Data Collection (MDC) involves the collection of information pertaining to pregnancy care, services and pregnancy outcomes. This is a population based surveillance system covering all births in NSW public and private hospitals, as well as homebirths. It encompasses all livebirths and stillbirths of a minimum 20 weeks gestation or 400 grams birth weight (NSW Public Health Bulletin Supplement, 1998).

The NSW Midwives Data Collection form (Appendix 2) is used to gather information relevant to the pregnant women's demographic details, maternal health, pregnancy, labour, delivery and perinatal outcomes. The completed forms are forwarded to the Patient Management Unit of the Information Management and Clinical Systems Branch of the NSW Health Department, where they were compiled into the Midwives Data Collection (NSW Public Health Bulletin Supplement, 1998).

4.6.2. Westmead Hospital Clinical Information System

The relevance of including information regarding the Westmead Hospital Clinical Information System was two fold. Firstly, it highlighted the crucial role of the midwife in processing appropriate information into the clinical system. Secondly, statistical information are readily generated and quickly accessible. A case in point is this investigator's use of the clinical system to extract
relevant statistical information to support the findings from this study (section 7.2.2). Permission was given by Professor Brian Trudinger, head of Obstetric and Gynaecology Department at Westmead Hospital, to use relevant statistical information for this thesis.

The Westmead Hospital Clinical Information System contributes to the state wide collection of information relating to births in the hospital. Prior to 1995, the midwives at Westmead Hospital recorded the relevant information of all live and stillbirths by completing a hard copy of the Midwives Data Collection form. However in 1995, the Westmead Hospital Clinical Information System ‘replaced’ the Midwife Data Collection forms (Appendix 2) that were completed by all midwives at the completion of a woman’s labour. The current format is an electronic version of the old form.

With the current system of data collection at Westmead Hospital, all relevant information regarding the individual pregnant woman is entered into the computerised clinical information system. The information gathered is similar to that as the previous Midwife Data Collection form used. At the ‘booking in’ visit, all relevant medical, surgical, social, obstetric and other history is obtained by the midwife during the ‘booking in’ session. The information is entered into the computer. Admissions to the antenatal ward, delivery suite and postnatal wards are appropriately recorded in the clinical information system. After the delivery of the baby, the intrapartum and delivery events are duly entered in this system. Likewise, prior to discharge of the woman and her baby, a delivery event, postpartum and neonatal details are updated and a
hard copy is printed for inclusion in the woman's medical record. The hard copies provide a summary of obstetric and neonatal information. They serve as a tool by providing relevant information to facilitate the continuation of care in the community by the community nurse and general practitioner.

The information from the Westmead Hospital Clinical Information System could be downloaded to the Clinical System Branch (Obstetric) at the NSW Health Department upon request from the NSW Health Department. The information provides relevant data and contributes in generating the NSW Mothers and Babies Report. In collaboration with the NSW Midwives Data collection (MDC), the Neonatal Intensive Care Units' Data Collection and the NSW Birth Defects Register, an annual NSW Mothers and Babies Report is published by the NSW Health Department called the NSW Public Health Bulletin Supplement. Some the information provided in the NSW Mothers and Babies Report includes trends in births and confinements in NSW, confinements by type of delivery and hospital, demographic dynamics and changes in NSW, neonatal and perinatal outcome, maternal mortality and morbidity rates and type and incidences of birth defects.

4.7. Summary

In summary, the role of a midwife at Westmead Hospital encompasses the provision of midwifery care at all stages of pregnancy, labour and post partum care which is consistent with the practice of midwives in Australia. This role incorporates the accurate documentation of all care given to a pregnant woman and appropriately recording this information into the Westmead
Hospital Information System. This fulfils the obligatory and participatory role of a midwife in gathering data for the NSW Midwives Data Collection (MDC), which is used to generate the annual NSW Mothers and Babies Report by the NSW Health Department.

4.8. Conclusion

In conclusion, a brief description of the WSHA, the Women’s Health and Neonatal Care Unit and the role of the midwife at Westmead Hospital were presented to provide a background information of the setting where this survey research was developed and conducted. There are different models of maternity care that are available at this hospital, allowing the childbearing woman to select the type of care that is most appropriate for her.

The functions of the NSW Midwives Data Collection (MDC), Westmead Hospital Clinical Information System and the relevance of data collection of live and stillbirths in NSW were discussed. The role of a midwife in assisting data collection for these awareness of maternity related information systems for the NSW Health Department was outlined.

The role of a midwife at Westmead Hospital was highlighted in this chapter. It is this investigator’s experience that the pregnant women are uncertain of the role of the midwife. There are perceptions by pregnant women that an obstetrician has to be called for a normal delivery. This study therefore aims to explore the women’s perceptions of the role of the midwife. In an attempt to discover how we might ultimately rectify any misconceptions and reinforce
correct perceptions, a knowledge and understanding of the women’s prior perceptions is imperative. Following on from this chapter, the methodology used in this survey is discussed.
Chapter Five: Methodology

5.1. Introduction

This study is a partial replication of a study by Leach et al (1998). A detailed discussion of the study by Leach et al (1998) was presented in section 3.2.

The methodology of this survey is discussed in this chapter. Cormack (1996) stated that “methodology concerns questions about the manner in which knowledge about what exists can be gained” (p. 116). The data obtained is analysed in the next chapter.

The demographic details are presented, followed by the quantitative analysis using descriptive statistics. Thematic analysis was used to analyse the qualitative data. This chapter includes the discussion of the type of survey, consultation with a statistician to review the survey questions and coding of the questions. The Human Ethics Committee of Western Sydney Area Health Service's request for the translation of the prompt card for women from non-English speaking background (NESB) were accommodated. The format of the questionnaire is discussed and the questions are presented in the appropriate tables. This is followed by a discussion of the sample characteristics, rationale for selecting the sample and the sample size, the venue of recruitment, the recruitment process, the ethical considerations and the time frame of the recruitment.
5.2. Method of data collection

5.2.1. Survey

This research project is a quantitative descriptive study with the purpose of exploring childbearing women's perception of the role of a midwife. The survey approach was selected because it has the advantage of gathering information on people's opinions and views and the potential to reach a larger proportion of people. Moreover, this was a replication of the study by Leach et al (1998), and a modification of the method was appropriate. Because of the quantitative aspects of the study, this method was a major consideration for the project. Polit and Hungler (1989) explained that surveys are advantageous in gathering information pertaining to people's values, attitudes, opinions and knowledge and surveys are geared towards collecting information pertaining to the prevalence, distribution and the relationships of variables within the population.

A disadvantage of survey is the lack of detailed 'probing' into people's behaviours and feelings and that survey research is more appropriate for extensive rather than intensive analysis. However, the format of the semi-structured questionnaire used in this project made it possible for elements of the qualitative aspects of the participants' view and opinions to be explored.
5.2.2. Survey technique

There are several types of survey techniques. Personal interview, telephone interview and mailed questionnaire are the three most common methods of gathering information in a survey (Polit & Hungler, 1989).

Personal interviewing of participants provides the opportunity for a 'personal touch' because it allows the participants to meet the interviewer in a face to face 'encounter'. In telephone interviews and postal questionnaires, the investigator is not privy to the source of information due to the lack of visual contact from a personal encounter with the participants.

In this survey, personal interviews of the participants were conducted by the investigator. An advantage of this technique is that it permitted the investigator to meet with the participants face to face and gather information from them in the privacy of a single room. Polit and Hungler (1989) wrote that the face to face interview technique is regarded as one the most useful methods of gathering survey data because of the quality of the information gathered. People preferred to be interviewed face to face in comparison with telephone or postal questionnaires. In this survey, the participants were notably more relaxed when they were in a single room in comparison with waiting in the clinic's waiting lounge area. A majority of the participants were responsive and forthcoming with their answers.
5.2.3. Questionnaire

The questions were taken directly from the Leach et al's (1998) study. The questions in the semi structured questionnaire were designed to ‘extract’ answers of both quantitative and qualitative perceptions.

The semi structured questionnaire has two parts. The first part of the questionnaire consisted of three sets of questions relating to perceptions of staff (Appendix 4) and the second part of the questionnaire comprised demographic questions (Appendix 5). A prompt card with a selection of prescribed tasks carried out by the midwives was used in conjunction with questions two and three.

The following table was adapted from the Leach et al’s (1998) study. It showed the three questions in the semi structured questionnaire. The questions form the first part of the semi structured questionnaire, exploring participants' perceptions of the role of a midwife.

Table 2 The unstructured and semi structured part of the semi structured questionnaire

<table>
<thead>
<tr>
<th>Question 1</th>
<th>Could you please describe for me, in general, what a midwife does in relation to helping you with your maternity care?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 2</td>
<td>Do you know of any specific thing or things she or he is trained to do to help you with your pregnancy and childbirth? I will show you a list and if you think anything on this is applicable, please indicate the item or items. SHOW PROMPT CARD</td>
</tr>
<tr>
<td>Question 3</td>
<td>Is there anything that you 'believe' she/he is not qualified to do for you? I will show you the card again SHOW PROMPT CARD</td>
</tr>
</tbody>
</table>

Adapted from Leach et al (1998)
5.2.3.1. Perceptions of staff

In the first part of the questionnaire, there were 3 sets of questions. These were questions aimed at discovering what were the participants' perceptions of the staff. This is discussed as follows in section 5.2.3.1.1.1 and 5.2.3.1.1.2.

5.2.3.1.1. Preparing for the process

The investigator acknowledged the necessity to be acquainted with the process of approaching and recruiting prospective participants for the survey, familiarity with the format of the questionnaire, the questions and the process of interviewing participants. To achieve this, the first five participants recruited were portioned off as a pilot study. After interviewing the first 5 recruits, the investigator felt comparatively more 'comfortable' in approaching and recruiting the participants, conducting the interview, familiarity with the format of the questionnaire and the single private rooms where the interviews of the participants were conducted. Most of the participants that were recruited requested for their spouse or relative to be present at the interview, these were accommodated according to the participants' requests.

5.2.3.1.1.1. Question one

The first question is an unstructured question which allowed the participants to describe in general, what they perceived a midwife does in relation in helping her with her maternity care (Table 2).
The investigator, currently a practising midwife, was careful to avoid leading participants in their responses by allowing the participants to initiate their answers and only ‘prompted’ them if they were reluctant to answer after reading the question. If the participants remained reluctant to offer their answers, this was not ‘pursued’ in deference to their privacy.

In question two and three where the prompt card was used as part of the questions, the participants were more enthusiastic by the option of selecting their answers from a prescribed list of tasks.

5.2.3.1.1.2. Questions two and three

These questions were semi structured questions (Table 2). The participants were requested to give their answers first before selecting their choices from a prescribed list of tasks in the prompt card.

The rationale for using the semi structured questions was to allow the investigator to quantify prescribed tasks performed by the midwife and at the same time to gather additional qualitative information by allowing the participants to give answers that were not included on the prompt card.

The prompt card (Appendix 3) contains a list of prescribed tasks. These tasks were divided into 3 sections. They were tasks before birth, at birth and after birth. The participants were requested to select or indicate their choice by ‘ticking’ the relevant task on the prompt card.
The participants were more forthcoming with their responses when they were 'guided' by a set of prescribed 'tasks' or 'answers' where they were required to 'tick' their appropriate answers. The hospital statistician advised that for statistical purposes, coding should be used. Therefore, the individual 'answers or tasks' in the prompt card were given a number. The participants were reassured that the answers were numerated for statistical purposes only.

During the interviews, a few participants sought assistance from their spouses or relatives, however they were very obliging and accommodated the investigator's polite request to refrain from that because it was the participants' opinions and views that were being surveyed. However, after completion of the questionnaire, 'open discussion' was available if requested by the participants but these opportunities were limited by the time constrains due to their scheduled 'booking in' appointments with the midwives.

5.2.3.1.1.3. Demographic detail

Demographic details formed the second part of the questionnaire (Appendix 5). Demographic details were included in the questionnaire because this study is a partial replication of the study by Leach et al (1998) and demographic questions were a part of the questionnaire. The demographic questions used in this survey were adapted from the questionnaire used by the Leach et al's (1998) study.

Demographic details were essential in gathering information to develop a demographic profile of the recruits who participated in this survey. This allows
for comparison or correlation of certain groups of participants to see if their views or perceptions were similar or different from any given groups, for example, professional, cultural or age groups. An assumption was made by the investigator that those who are from different cultural, professional and age groups may have different perceptions of the role of a midwife.

At the commencement of the project, the questionnaire was reviewed by a statistician and the appropriate method of analysis was sought.

5.3. Consultation with a statistician

The statistician at Westmead Hospital was consulted to review the questions and the format of the questionnaire. The advice given by the statistician, which was followed was to code the prescribed tasks on the prompt card (Appendix 3) and the data from the 120 subjects would increase reliability of results. Originally, the sample size was selected to be manageable in terms to the time the investigator has available to interview participants to complete the course requirements.

The most appropriate method of analysing the data gathered using the prescribed questionnaire is descriptive statistics. The statistical tool deemed appropriate in analysing the statistics was to use the Statistical Package for the Social Sciences (SPSS).
5.4. Translation of prompt card

Requests were made by the Human Ethics Committee of Western Sydney Area Health Service, for the prompt card to be translated to the appropriate languages, to accommodate the non-English speaking women.

The midwifery staff from the University Clinic (Clinic H), indicated that from their contacts and experiences with the interpreters that were most frequently booked to assist in their 'booking in' history, the most useful languages to be translated would be Mandarin, Vietnamese, Korean, Tagalog, Punjabi, Farsi, Arabic and Turkish.

The Manager from the Interpreter's Service based at the Cumberland Hospital was consulted regarding translation of the prompt card for non-English speaking women. The investigator was informed by the Manager that there are interpreters who are not accredited to translate and advice was given to contact the appropriate registered translators to perform this task. This advice was acknowledged and followed. The appropriate accredited translators from the Western Sydney Area Health Service, and registered private translators were contacted to assist in translating the prompt card to the relevant languages. Upon completion from the preliminaries mentioned in Section 5.4 and Section 5.5, ethical clearance was granted by the Human and Ethics Committee of Western Sydney Area Health Service. Recruitment of the sample commenced.
5.5. Sample

The random convenience sample of primigravidas (first time pregnant women) was recruited from the antenatal clinic in the University Clinic (Clinic H). The aim of the study was to explore the childbearing women's perception of the role of a midwife. The investigator stipulated that a random purposive sample of women who were pregnant for the first time were eligible to participate in this survey. Multigravidas (pregnant more than once) were excluded from this study.

By limiting the sample group to a select sample of primigravidas, the investigator intended to exclude outside influences and factors that may affect these women's perceptions. Luanaigh (1995) stated in his study that by virtue of their first pregnancy, it was suggested that their knowledge of maternity services would be more limited.

The participants were screened using the Selection Criteria Checklist & Registration forms (Appendix 6). These were used to ensure that all participants in this survey met the criteria set up by the investigator. The criteria included the age of the participants, whether the study had been explained to the participants, the parity of the participants, completion of consent form, hospital classification (clinic or private patients), first language, country of birth and whether an interpreter was required.

Primigravidas aged 17 years and over were selected. The primigravidas aged less than 17 years old were excluded because the minimal age to consent for
a research study is 17 years, see Appendix 7 for age of participant. This decision is in keeping with the Western Sydney Area Health Service's consent to participate in a research (Appendix 7), a participant between 14 and 16 years old may sign the consent form together with the signature of their parent or guardian.

To reduce bias towards any particular group of women, all participants who met the criteria, regardless of their hospital classification were included in the study. Participants from non-English speaking backgrounds were included in this survey also to reduce bias. The Health Department's interpreters were always available because they were 'pre-booked' to attend to the patient at their 'booking in' appointment.

5.5.1. Sample size

A total of 130 subjects (100%) were approached to participate in this survey study. One hundred and twenty (120) subjects were recruited and 10 subjects declined to participate. After making allowances for 5 participants to be used as a pilot study, 1 participant removed from the study for ethical reasons and then removing 6 multigravidas who were inadvertently recruited for this survey, the final sample size was 108 (83.1%, Table 3).

In the qualitative analysis, 'saturation point' was reached after the 30th participant, when a significant number of common themes were emerging and there were no new or different themes given by the participants. Holloway (1997) explained that saturation has taken place when there are no new ideas
and relevant additional data; and sampling is continued until categories, their properties, dimensions and links between categories are established. Recruitment of participants was continued up to 120 participants, to meet the number proposed for this project in fulfilling the quantitative aspects of the project.

Moreover sample size is important because a bigger sample is more likely to represent the population (Wilson, 1989). Power analysis which is a procedure used to estimate sampling size requirements (Polit & Hungler, 1989) was not used to determine the sample size for this study because the sample size of 120 participants was selected to be manageable in terms of the time this researcher had available to interview patients to complete the course requirements.

5.6. Venue

All the participants for this survey were recruited from the University Clinic H (antenatal clinic) at Westmead Hospital. The Western Sydney Area Health Service Human Research Ethics Committee requested that the participants should not be approached in the clinic waiting area but this should be done in a more private area. To meet this requirement, the Nursing Unit Manager in Clinic H was consulted regarding this issue. Assurance was given by the Nursing Unit Manager that single rooms could be made available in Clinic H for the purpose of this research survey and permission was granted to occupy two single rooms. These were made available for the duration of this survey.
All pregnant women presenting for 'booking in' by midwives in Clinic H have a referral letter from their general practitioners. This source of information was made available to the investigator, who had the opportunity to approach first time pregnant women. She invited them into the single rooms, away from the other pregnant women, and asked whether they would like to participate in a survey project to explore childbearing women's perception of the role of a midwife. The research was briefly explained to the potential participants. Once consent was obtained, the participants were requested to remain in the single room to ensure privacy during the interview.

5.7. Recruitment

Recruitment of the participants was conducted in Clinic H while the participants were waiting to be 'booked in' by a midwife. The midwifery staff members working in Clinic H were informed about this survey 2 weeks prior to commencement of the interviewing process.

Only primigravidas (irrespective of their hospital classification) who met inclusion criteria were approached by the investigator to participate in this study: while the participants were waiting to be 'booked in' by the Clinic H midwives. Access to information about the parity of the participants was obtained from the referral letter by their referring general practitioners, as mentioned in Section 5.7. Selection criteria forms (Appendix 6) were used to ensure that all participants who participated in this were eligible to enter this study.
Participants' inconvenience was kept to a minimum. The participants who consented and participated in this survey were not disadvantaged in their waiting time for their appointments to be 'booked in' by the midwife. The interview took an average of 10 minutes which was the approximate time spent waiting to be called by a midwife for their 'booking in' appointments/interviews, in the normal course of events.

5.8. Ethics

Ethics approval for this survey was granted by the Western Sydney Area Health Service Human Research Ethics Committee. The request by this Committee included approaching and conducting the interviews in single rooms to maintain the participants' privacy, translation of the prompt cards to the relevant languages to cater for non English speaking participants, the consent form should include provision for the signature of an interpreter who is involved in the interview process and data to be stored for five years in a locked cabinet or office at the workplace. Arrangements were made to store the data in a locked cabinet in the principal research supervisor's office. The participants were reassured that confidentiality would be maintained and refusal to participate in this one-off interview would not affect or alter their care. There would be no direct reference to the participants in the written version of the results. Anonymity and confidentiality would be maintained.

If the participants agreed to participate in this survey, they were given time to read the 'Patient's information form' (Appendix 8) and were given the opportunity to ask questions regarding the research.
Written consent was obtained from each participant. If an interpreter was required to interpret for the participants, then the interpreter's signature would be included in the 'Consent to participate in Research' form (Appendix 7).

5.9. Time frame for data collection

The time frame allocated for data collection for 120 questionnaires was 8 to 12 weeks. The time frame was set based on the premise of interviewing 15 participants every Friday during 'booking in' for eight consecutive weeks. The midwives in the antenatal clinic informed the investigator that an average of 60 pregnant women are booked at each Friday 'booking in' clinic. That is, 30 pregnant women 'booking in' the morning and another 30 in the afternoon clinic. The investigator speculated that out of the 60 pregnant women, there would be a minimum of 15 primigravidas. Therefore, 15 primigravidas multiplied by 8 weeks equals 120 primigravidas. Allowances were made that in event of a lack of the speculated 15 primigravidas per Friday 'booking in' day, an additional period would be required and four weeks were added into the time frame, with the result of an allotted 8 to 12 weeks for the survey interviews. The actual time taken to complete this process was 9 weeks. The positive response from the participants to be involved in this survey made it possible for the survey to be completed within the stipulated time allotted for the data collection. The survey interviews were commenced on 4th February 2000 and completed on 12th May 2000.
5.10. Conclusion

In conclusion, this chapter discussed the rationale for the methods that were utilized to answer the research question. The survey questions were adapted from the study by Leach et al (1998). The interviews were conducted by the investigator. The questionnaire consisted of one unstructured and two semi-structured questions. Demographic details were part of the questionnaire. The prompt card was used in conjunction with questions two and three. A statistician was consulted to review the format of the questionnaire. Translation of the prompt card was attended as required by the Human Ethics Committee of Western Sydney Area Health Service, who granted permission for the survey to be conducted at Westmead Hospital. A sample of the primigravidas were recruited from Clinic H where the interviews were conducted in single rooms. The recruitment period was achieved within the stipulated time frame for the survey. The following chapter will discuss the findings derived by using the methodology discussed in this chapter.
Chapter Six: Data analysis and interpretation

6.1. Introduction

The preceding chapter presented the methodology used in this survey. The data gathered was analysed using two types of analysis. They are quantitative analysis using descriptive statistics and qualitative analysis of the data using thematic analysis.

The results from the quantitative analysis are presented in tables, charts and figures. The key findings are highlighted and discussed. Thematic analysis identified themes, categories and sub categories and these were noted to be linked to various aspects of midwifery care. The qualitative findings are presented and summarized in tables. Key findings are discussed. The quantitative analysis is presented first followed by the qualitative analysis.

Descriptive statistics was used to analyse the quantitative data which was obtained using a frequency count of the answers from the prompt card. Estimates are expressed as percentages together with their 95% confidence intervals (95% CI). Statistical analysis was conducted by using SPSS for Windows v10.3.

6.2. Data analysis

Data analysis involves the systematic process of sifting through the data gathered in a project. From the commencement of the data collection in this
survey, data analyses were undertaken concurrently. By consistently reviewing and analysing the data collected, various themes and views held by the participants emerged. There was a consistent recurrence of themes, phrases, views and aspects of care. As previously mentioned in section 5.6.1, 'saturation point' was reached after the 30th participant. Common themes were recurring and no new themes or topics were identified. Recruitment of participants continued until the stipulated 120 participants were recruited (Section 5.5.1).

Whilst all attempts were made by the investigator to encourage spontaneous responses from the participants in the unstructured and semi structured questions, it became apparent to the investigator that some participants remained hesitant and required encouragement in expressing their views and opinions. There were numerous occasions where the participants were politely requested and encouraged to express their individual perceptions rather than consulting the opinions of their partner or family. All due respect was accorded to the support person. If their support persons persisted in voicing their opinions or views, these were noted but only the participants' perceptions were recorded.

In this survey, the data collected from the semi structured questionnaire produced two types of data. They were quantitative and qualitative data. Quantitative data analysis using descriptive statistics will be discussed first followed by the qualitative data analysis using thematic analysis.
6.3. Quantitative data analysis

The results from the analysis of the demographic details are presented in section 6.4.1.1 to 6.4.1.14. The quantitative results from question two and three are presented in sections 6.4.2.1 and 6.4.2.2 respectively.

This section describes the results of the analysis of the data obtained from demographic details and the quantitative answers from the prompt card used in question two and question three. Quantitative analysis involves sorting the data. Frequency count of each prescribed task was conducted and the respective percentages were calculated accordingly (Table 8 and 9).

6.3.1. Coding

Coding involves the process of translating verbal data into categories or numerical form (Wilson, 1989). In the prompt card (Appendix 3) each prescribed task was assigned a number (code) for the purpose of ‘differentiating’ and ‘naming’ the individual tasks. Responses were coded so that they could be processed by a statistical package (Polit & Hungler, 1989). There are no numerical values in these numbers which have the sole purpose of identifying each task or category. For example, gender have two responses, male and female, coded 1 and 2 respectively. In this survey, the prescribed tasks on the prompt card were individually numerated. Pregnancy was given the number 1, so pregnancy = 1, maternity services = 2 and so forth (Appendix 3). There are no quantitative values in these numbers. Quantitative data analysis in this project involves frequency counting of the
number of responses (answers) of each prescribed task listed on the prompt card.

6.3.2. Descriptive statistics

Descriptive analysis was used to analyse the quantitative data and descriptive statistics was the method used for organising, summarising and describing quantitative data. Kaplan (1987) explained the “methods that are used to organise, summarize, and describe observations are called descriptive statistics” (p. 3). The analysis of the quantitative data involved a process of frequency counting of the responses by the participants.

6.3.2.1. Frequency count

To summarize the data, a frequency count of the answers from the prompt card was conducted. Each question could only be answered yes or no. Therefore, the data could be summarised by counting the number of participants who agree and express this as percentages of the total interviewed. The 95% confidence interval for any percentage (p%) is calculated as shown in Figure 6 and 7. The percentages allow for comparison with another value, in a way that it makes ‘sense’ (Wilson, 1989). Therefore, the primary focus of the data derived from the frequency count in each category is to determine which of the category (prescribed task) occurs the most or least often (Martin & Pierce, 1994).
Figure 6 Formula for calculating the lower limits of the 95% confidence interval (CI) of each percentage.

\[
\text{Lower limit} = p\% - 1.96 \sqrt{\frac{p\% (100 - p\%)}{n \ (n=108)}}
\]

Figure 7 Formula for calculating the upper limit of the 95% confidence interval (CI) of each percentage.

\[
\text{Upper limit} = p\% + 1.96 \sqrt{\frac{p\% (100 - p\%)}{n \ (n=108)}}
\]

The following section presents the quantitative results. This section commenced by highlighting the recruitment results and the final number of recruits who participated in this survey. This is followed by the demographic results and the quantitative results derived from the analysis of the answers from the prompt card used in question two and three. The demographic and quantitative results are graphically presented in tables, figures and charts using descriptive statistics.

6.4. Quantitative results

A total of 130 subjects were approached for this survey (100%). One hundred and twenty (120) participants, indicating a response rate of 92.3% consented
to participate in the survey. Ten (10) subjects (7.7%) declined to participate. Five (5), that is, 3.8% of the 120 participants were used as a pilot study, leaving a total of 115 participants.

One participant (0.8%) was removed from the study for ethical reasons. This left 114 subjects (99.1%) who actually participated in this survey. The study stipulated that primigravida only would be recruited. However, inadvertently, six (4.6%) multigravidas were recruited. These multigravidas were duly omitted from the survey. This left a final sample size of 108 indicating 83.1%, recruited for this study. The following table summarises details of the sample recruitment.

<table>
<thead>
<tr>
<th>Recruitment</th>
<th>Number</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approached</td>
<td>130</td>
<td>100.0%</td>
</tr>
<tr>
<td>Final sample</td>
<td>108</td>
<td>83.1%</td>
</tr>
<tr>
<td>Exclusions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Declined</td>
<td>10</td>
<td>7.7%</td>
</tr>
<tr>
<td>2. Pilot study</td>
<td>5</td>
<td>3.8%</td>
</tr>
<tr>
<td>3. Removed from study (ethical reason)</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>4. Multigravidas - omitted from the study</td>
<td>6</td>
<td>4.6%</td>
</tr>
<tr>
<td>Total Excluded</td>
<td>22</td>
<td>16.9%</td>
</tr>
</tbody>
</table>

6.4.1. Demographic results

The second part of the semi structured questionnaire was the demographic details. Demographic details were part of the questionnaire used in the Leach et al’s (1998) study and were included in the semi structured questionnaire.
The demographic details of the participants are discussed in section 6.4.1.1 through to 6.4.1.14.

6.4.1.1. Hospital classification of the participants

There were one hundred and eight participants (108) recruited for this study, 31 participants (28.7%) were booked privately with an obstetrician and 77 participants (71.3%) chose care provided by obstetricians and midwives employed by the hospital (clinic patients).

*Table 4 Hospital classification of participants*

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>31</td>
<td>28.70%</td>
</tr>
<tr>
<td>Clinic</td>
<td>77</td>
<td>71.30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

6.4.1.2. Parity of the participants

There were 108 primigravidas and 6 multigravidas who were inadvertently recruited for this study. They are 94.7% and 5.3% respectively.

*Table 5 Parity of the participants*

<table>
<thead>
<tr>
<th>Parity</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primigravia</td>
<td>108</td>
<td>94.70%</td>
</tr>
<tr>
<td>Multigravia</td>
<td>6</td>
<td>5.30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>114</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
6.4.1.3. Age group of participants

There were 7 participants in the age group of 17-19 years and 23 participants in the 20-24 years age range. The majority of the subjects recruited for this survey were in the age range between 25-29 years and the second highest number in the group between 30-34 years. There were 10 participants in the 35-39 years age group.

Chart 1 Age Groups of the Participants
6.4.1.4. Marital status

A majority of the participants, 80.6% (n=87) were married and 9.3% (n=10) were living with a partner. There were 8 participants (7.4%) who were single and 1 (0.9%) participant was separated from her partner. There were 2 (1.9%) participants who did not reveal their marital status.

Chart 2 Marital Status of the Participants
6.4.1.5. Accommodation status of the participants

Fifty seven (53%) participants, that is, a majority of the participants owned their own homes and 37 (34%) rented privately. There were 13 participants (12%) boarding with their parents and one participant (1%) rented with the department of housing.

*Chart 3 Accommodation Status of the Participants*
6.4.1.6. Access to telephone by the participants

Telephone access was available to the majority of the participants, 98% (n=106), One (1%) participant did not have telephone access. The other 1% (n=1) participant had mobile phone facilities only.

*Chart 4 Telephone Access of the Participants*
6.4.1.7. Full time or part time work of the participants

Most of the participants, 66% (n=71) were employed on a full time basis, with 17% (n=19) in part time employment. There were 16% (n=17) participants who were unemployed and 1% (n=1) was employed on a casual basis.

*Chart 5 Employment status of the participants*
6.4.1.8. Participants who have worked since leaving school

A majority of the participants have worked since leaving school, n=101 (94%) and 5 (4%) have not worked since they left school. There were 2 (2%) participants where this information is not known.

Table 6 The number of participants who worked since leaving school

<table>
<thead>
<tr>
<th>Worked since leaving school</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>101</td>
<td>94%</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>Not known</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100%</td>
</tr>
</tbody>
</table>
6.4.1.9. Full time education or school education

A majority of the participants, n=19 (17.5%) left school or full time education at the age of 16 years and the second biggest group, n=18 (16.6%) in the ages of 17 years and 18 years. There were 14 participants (12.9%) who left the academic arena at 21 years, 9 (8%) at 19 years old and 8 (7.4%) at the age of 20 years. There were 5 (4.6%) who left school at 15 years old and 5 (4.6%), leaving full time education at 22 years old and 4 (3.7%) who left at the age of 23 years. One (1%) participant left school at 14 years old and there were 7 others (6.5%) who left full time education between 24 to 25 years.

Chart 6 Age when the participants left school or full time education
6.4.1.10. Job or occupation of the participants

The jobs held by the participants cover a wide range, from a hairdresser, across the financial and information technology sectors to the health professionals like doctors, registered nurses and radiographers.

To narrow the vast array of the participants' occupations, the occupations were broadly placed into similar related professional groups. For example, registered nurses, doctor, chemist, radiographer, social worker were placed into the health profession group; software engineers, computer analyst, computer programmer were placed into the information technology group, and so on.

The following chart shows the occupations of the participants. The clerical, administrative and receptionist group of occupations represented the largest group with the health profession group, administrative accounting and housewives all forming the second largest groups of professions held by the participants.
6.4.1.11. Country of birth of the participants

There were 25 countries represented in this survey. Forty nine participants (46.9%) were born in Australia. The next biggest group were from China (n=7, 6.5%), followed by 6 (5.5%) from New Zealand, five each from Vietnam and India.
From each of the following countries, Philippines, Fiji and Turkey, there were 4 participants and 3 participants from Singapore, Sri Lanka and Lebanon. From Argentina and Indonesia, there were 2 participants from each of these countries. There was only one participant from each of these countries. They are Laos, Cambodia, England, Scotland, Bosnia, Iran, Afghanistan, Portugal, Algeria, Italy, Uruguay and Chile.

*Chart 8 Participants' Country of Birth*
6.4.1.12. Participants’ length of residence in Australia

As mentioned in Section 6.4.1.11, there were 49 participants who were born in Australia. A majority of the participants (n=25) lived in Australia between 1-5 years. There were 12 participants who have resided in Australia for 11-15 years and 10 participants for a period of 6-10 years. Two (2) participants lived in Australia for 16-20 years, 3 participants were here for 21-25 years, 4 participants have lived in Australia for 26-30 years and only 1 participant had lived here for over 31 years (that is, 31-35 years). There were 2 participants who did not specify the length of stay in Australia.

*Chart 9 Participants’ Length of stay in Australia at the time of recruitment for this survey*
6.4.1.13. First language of the participants

There were 59 participants who spoke English as their first language. There were 5 participants who spoke Spanish and another 5 participants spoke Hindi as their first language. The following first language, Lebanese, Cantonese, Mandarin and Tagalog were spoken by the participants, four in each of these groups, as their first language. There were 3 participants who stated that they spoke Tamil, another 3 spoke Hokkien and 3 more participants revealed that they spoke Vietnamese as their first language.

There were 2 participants in each of these ‘first language’ groups. They are Arabic, Turkish, Indonesian and Persian. Laotian, Aramic, Bosnian, Portuguese, Cambodian and Italian were first languages spoken by the remaining 6 participants, that is, one in each these groups.

Chart 10 First Languages spoken by the Participants
6.4.1.14. Interpreter service required

There were 5 participants who required interpreters to assist them in this survey. They were in these languages; Arabic (n=1), Mandarin (n=1), Turkish (n=1), Cantonese (n=1) and Farsi (n=1).

<table>
<thead>
<tr>
<th>Language</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>1</td>
</tr>
<tr>
<td>Mandarin</td>
<td>1</td>
</tr>
<tr>
<td>Turkish</td>
<td>1</td>
</tr>
<tr>
<td>Cantonese</td>
<td>1</td>
</tr>
<tr>
<td>Farsi</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

Table 7 The type of interpreter service required by the participants

6.4.2. Questionnaire- Perception of staff

The first part of the questionnaire consisted of questions in relation to perceptions of staff. There were three sets of questions (Section 5.2.3, Table 2). The first question was an unstructured question and only qualitative data were obtained from this question. The results from the qualitative analysis of question one are presented in 'Qualitative Analysis' (Section 6.5).

Question two and three are semi structured questions. In these two questions, the participants were initially invited to give their own answers. Following that, the prompt card was shown to the participants and they were requested to make a selection from a list of the prescribed tasks performed by a midwife.

The quantitative data from the two semi structured questions, question two and three, were sourced from the answers on the prompt card. The data were
analysed quantitatively and using descriptive statistics are presented by using charts and tables in section 6.4.2.1 (question two) and 6.4.2.2 (question three).

The qualitative aspects of the data from questions two and three were analysed using thematic analysis. The results are presented in sections 6.5.1.2 and 6.5.1.3 respectively.

6.4.2.1. Quantitative answers from prompt card (Question 2)

Question two asked the question:

"Do you know of any specific thing or things she or he is trained to do to help you with your pregnancy and childbirth?
I will show you a list (i.e. prompt card) and if you think anything is applicable, please indicate the item or items."

The quantitative data from the semi structured questions was obtained from the prompt card and the results are presented in the quantitative result. In the prompt card, coding was used. A number was assigned to classify the individual prescribed task listed on the prompt card. For example, giving antenatal advice on pregnancy = 1, refer to Table 8 and Table 9. Frequency counts of the answers from each of these prescribed tasks was conducted. The total of each prescribed task is recorded and the respective percentages calculated accordingly. These are shown in chart 11 and chart 12. Statistical significance, using 0.05 level of significance (95% confidence interval) was
selected. The lower and upper limits of the confidence interval of each percentage were calculated and shown in Figure 6 and 7 respectively.

*Chart 11 Specific tasks that a midwife is trained to help you with before birth (question two)*
The following table presents the results from a frequency counting of responses to each prescribed task listed on the prompt card. As mentioned in section 6.3.2.1., the percentage of each prescribed task is the percentage of the number of responses from the 108 participants. The lower and upper limits of the 95% confidence interval (CI) were calculated for each prescribed task (Figure 6 and 7).
Table 8 Number and percentage of participants who agreed that a midwife is trained to assist the pregnant women's pregnancy and childbirth (before, at and after birth) together with the 95% CI for the percentage.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Number in agreement</th>
<th>Percentage % agree (n=100)</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Giving advice before birth on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancy</td>
<td>96</td>
<td>88.80%</td>
<td>83%</td>
<td>95%</td>
</tr>
<tr>
<td>Maternity services</td>
<td>91</td>
<td>84.20%</td>
<td>77.40%</td>
<td>91.10%</td>
</tr>
<tr>
<td>Maternity benefits</td>
<td>60</td>
<td>55.50%</td>
<td>48.20%</td>
<td>64.90%</td>
</tr>
<tr>
<td>Childbirth</td>
<td>99</td>
<td>91.60%</td>
<td>86.50%</td>
<td>96.90%</td>
</tr>
<tr>
<td>Checking growth of baby</td>
<td>89</td>
<td>82.40%</td>
<td>75.20%</td>
<td>89.60%</td>
</tr>
<tr>
<td>Listening to baby</td>
<td>83</td>
<td>78.80%</td>
<td>69.90%</td>
<td>84.80%</td>
</tr>
<tr>
<td>Taking blood samples</td>
<td>74</td>
<td>68.50%</td>
<td>59.80%</td>
<td>77.30%</td>
</tr>
<tr>
<td>Checking blood pressure</td>
<td>94</td>
<td>67.00%</td>
<td>50.70%</td>
<td>93.40%</td>
</tr>
<tr>
<td>Checking position of baby</td>
<td>80</td>
<td>70.00%</td>
<td>55.80%</td>
<td>82.30%</td>
</tr>
<tr>
<td>Prescribing medicine</td>
<td>17</td>
<td>15.70%</td>
<td>8.87%</td>
<td>22.60%</td>
</tr>
<tr>
<td>Checking urine</td>
<td>76</td>
<td>70.40%</td>
<td>61.87%</td>
<td>78.90%</td>
</tr>
<tr>
<td>B. At Birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breech delivery</td>
<td>38</td>
<td>35%</td>
<td>28%</td>
<td>44%</td>
</tr>
<tr>
<td>Give epidural/anaesthetic</td>
<td>32</td>
<td>30%</td>
<td>21.40%</td>
<td>38.60%</td>
</tr>
<tr>
<td>Normal delivery</td>
<td>95</td>
<td>88%</td>
<td>81.90%</td>
<td>94.10%</td>
</tr>
<tr>
<td>Care in labour</td>
<td>100</td>
<td>93%</td>
<td>88.20%</td>
<td>97.80%</td>
</tr>
<tr>
<td>Forceps delivery</td>
<td>25</td>
<td>23%</td>
<td>15.10%</td>
<td>30.90%</td>
</tr>
<tr>
<td>Ventouse delivery (suction delivery)</td>
<td>23</td>
<td>21%</td>
<td>13.30%</td>
<td>28.70%</td>
</tr>
<tr>
<td>Suturing (stitching)</td>
<td>39</td>
<td>36%</td>
<td>27%</td>
<td>45%</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>10</td>
<td>9%</td>
<td>3.61%</td>
<td>14.40%</td>
</tr>
<tr>
<td>C. After Birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prenatal checking of baby and mother</td>
<td>98</td>
<td>90.70%</td>
<td>85.30%</td>
<td>96.20%</td>
</tr>
</tbody>
</table>

From the results shown in Table 8, it was noted that a majority number of participants believed that a midwife is trained to deliver babies normally, care for a woman in labour, give advice on pregnancy, maternity services and childbirth, check the growth of the baby, check blood pressure and perform post natal checking of the baby and mother. These procedures are predominantly “non medical” related procedures or tasks.
The participants significantly responded and believed that a midwife is not trained to perform caesarean delivery, prescribe medicine, perform manipulative deliveries like forceps and Ventouse (suction) deliveries. These are medically oriented tasks or procedures.

In terms of specific training for delivery of a baby, the specific significance of the results show that 88% (95% CI 81.9% to 94.1%) of the participants believed that a midwife is trained to perform normal deliveries in contrast to 9% (95% CI 3.6% to 14.4%) for caesarean section, (p < 0.05). That is, participants believed that a midwife is trained to perform normal deliveries and not trained to perform caesarean deliveries.

6.4.2.2. Quantitative answers from prompt card (Question 3)

Question 3 asked the question:

“Is there anything that you ‘believe’ she / he is not qualified to do for you?
I will show you the card (prompt card) again…….”

The results from the answers in the prompt card of question three are presented in the following charts and table.
Chart 13 Specific tasks that a midwife is NOT trained to do before birth (question three)
Chart 14 Specific tasks that a midwife is NOT trained to do at birth (question three)
Table 9  Number and percentage of participants who agreed that a midwife is NOT trained to do the specific tasks (before, at and after delivery) together with the 95% CI for the percentages.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Number in agreement</th>
<th>Percentage % agree (n=108)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Giving advice before birth on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancy</td>
<td>2</td>
<td>1.80%</td>
<td>-0.69%</td>
</tr>
<tr>
<td>Maternity services</td>
<td>5</td>
<td>4.60%</td>
<td>0.86%</td>
</tr>
<tr>
<td>Maternity benefits</td>
<td>24</td>
<td>22.20%</td>
<td>14.40%</td>
</tr>
<tr>
<td>Childbirth</td>
<td>2</td>
<td>1.80%</td>
<td>-0.69%</td>
</tr>
<tr>
<td>Checking growth of baby</td>
<td>4</td>
<td>3.70%</td>
<td>0.14%</td>
</tr>
<tr>
<td>Listening to baby</td>
<td>6</td>
<td>5.50%</td>
<td>1.23%</td>
</tr>
<tr>
<td>Taking blood samples</td>
<td>20</td>
<td>18.50%</td>
<td>11.20%</td>
</tr>
<tr>
<td>Checking blood pressure</td>
<td>5</td>
<td>4.80%</td>
<td>0.67%</td>
</tr>
<tr>
<td>Checking position of baby</td>
<td>14</td>
<td>12.90%</td>
<td>6.63%</td>
</tr>
<tr>
<td>Prescribing medicine</td>
<td>67</td>
<td>62.00%</td>
<td>52.90%</td>
</tr>
<tr>
<td>Checking urine</td>
<td>14</td>
<td>12.80%</td>
<td>6.63%</td>
</tr>
<tr>
<td>B. At Birth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breech delivery</td>
<td>62</td>
<td>57.40%</td>
<td>48.10%</td>
</tr>
<tr>
<td>Give epidural/ anaesthetic</td>
<td>64</td>
<td>59.20%</td>
<td>49.90%</td>
</tr>
<tr>
<td>Normal delivery</td>
<td>8</td>
<td>5.50%</td>
<td>1.23%</td>
</tr>
<tr>
<td>Care in labour</td>
<td>3</td>
<td>2.70%</td>
<td>-0.22%</td>
</tr>
<tr>
<td>Forceps delivery</td>
<td>67</td>
<td>62.00%</td>
<td>52.90%</td>
</tr>
<tr>
<td>Ventouse delivery (suction delivery)</td>
<td>69</td>
<td>63.60%</td>
<td>54.80%</td>
</tr>
<tr>
<td>Suturing (stitching)</td>
<td>59</td>
<td>54.60%</td>
<td>45.20%</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>86</td>
<td>79.60%</td>
<td>72.00%</td>
</tr>
</tbody>
</table>

C. After Birth

| Postnatal checking of baby and mother    | 3                   | 2.70%                     | -0.33%          | 5.87%           |

The results from Table 9 above showed that a majority of the participants believed that a midwife is not qualified to perform caesarean delivery, forceps and Ventouse (suction) delivery and prescribe medicine. These are predominantly medically oriented procedures and tasks.

The very small percentage of participants who believed that a midwife is not qualified to perform normal deliveries, care in labour, giving advice on
pregnancy, maternity services and childbirth, checking growth of baby, checking blood pressure and performing checks on baby and mother postnatally, confirmed the findings in question two, that a midwife is qualified to perform these procedures and tasks.

The results from this question (question three) substantiate the results in question two. The participants affirmatively believed that a midwife is not qualified to perform medically oriented procedures but qualified to perform midwifery related tasks and procedures.

As previously mentioned in section 6.4.2.2. (Table 9), in terms of training and therefore qualifications of a midwife, 79.6% (95% CI 72% to 87%) participants stated that a midwife is not qualified to perform caesarean delivery which was significantly more than 5.5% (95% CI 1.2% to 9.9%) to normal delivery ($p < 0.05$).

6.4.2.3. Summary of quantitative analysis

In summary, quantitative analysis showed that most participants believed that a midwife is qualified to perform normal deliveries and midwifery related tasks. From the results shown in Table 8 and Table 9, the majority of participants believed and stated that a midwife is not qualified to perform medically oriented tasks and procedures. The participants believed that a midwife is qualified to perform midwifery related procedures and tasks. The next section presents the qualitative analysis using thematic analysis.
6.5. Qualitative analysis

A considerable ‘pool’ of information was compiled from the qualitative data gathered at the interview. In qualitative analysis, a researcher is interested in seeking common themes and categories. Polit and Hungler (1989) explained that generally in qualitative analysis, the researcher commences the qualitative analysis by looking for themes or recurring regularities. Thematic analysis was used to identify the themes and recurring regularities.

The second part of the analysis of the data gathered in this survey involved qualitative analysis using thematic analysis. The qualitative results from question one (unstructured question) is presented in sections 6.5.1.1. and the qualitative results from question two and three are presented in sections 6.5.1.2 and 6.5.1.3 respectively.

6.5.1. Thematic analysis

Thematic analysis was an appropriate method of analysis because there were several themes which emerged and recurred during the interview process. By using thematic analysis, the investigator purposed to identify themes and categories. Therefore the qualitative data obtained from question one, two and three was analysed using this method of analysis.

Holloway (1997) stated that “thematic analysis is an analysis where the researcher identifies themes and patterns in the interview through listening to tapes and reading transcripts” (p.152). The answers from the survey were not
audio taped but written verbatim on the questionnaire where a space was allotted for the purpose of writing down the answers.

The process of sifting through the data began by typing out all the qualitative responses from each question. Next, the common and recurring words, phrases, views, midwifery tasks and aspects of midwifery care were sorted. The recurring words, phrases and views were identified, and were individually given a label. Holloway (1997) explained that the process of open coding involves sifting, breaking down and conceptualising the data.

The data were analysed ‘individually’ from the answers in the three separate questions. That is, data from question one was analysed in the context of question one. Similarly, the qualitative answers from the unstructured (question one) and semi structured (question two and three) questions were typed out to facilitate sifting, sorting and conceptualising the data.

Themes emerged from the recurring and common words. In each of these themes, specific common midwifery tasks and aspects of care were identified. These were linked to individual themes and from these themes, major and sub categories were identified. The themes were categorised into the major and sub categories.

The following example explains the identification of a theme from phrases and views expressed by the participants. For example, the word “advice”. It was
one of the common recurring words. The word was singled out from verbatim phrases and views like these:

“(the midwives) advise regarding diet and health, like a second mother”
“(the midwives) give advice on general questions and problems regarding pregnancy”
“(the midwives) offer advice and support on being a mother, personal and infant care”
“advice regarding nutrition, general care, lifting, vitamins, morning sickness”.

The word “advice” was coded and accordingly labeled “advice”. The relevant midwifery tasks associated with this word were nutrition, general care, pregnancy related questions and problems, infant and personal care. Progressive thematic analysis of the qualitative data were followed in a similar format. Numerous themes were identified. The coding, labeling, identification of themes and related midwifery tasks and care are detailed in tables in the next section.

6.5.1.1. Qualitative analysis of answers from question one

Question one

“Could you please describe for me, in general, what a midwife does in relation to helping you with your maternity care?”
From the answers given by the participants, the common words, phrases and views expressed and repeated consistently were noted. The words were advice, information, explain, assist, support, teach, educate, guidance, answer questions, deliver babies, knowledge of midwife, assist doctor, call or contact doctor, liaison person, midwife and lack of information and knowledge regarding a midwife.

The following table provides a summary of the themes identified from phrases or views expressed by the participants. The aspects of midwifery care connected to each theme is shown in the same table. In summary, sixteen (16) themes were identified from the verbatim phrases or views, from answers to question one.
Table 10 Summary of themes identified from phrases or views and the aspects of midwifery care connected to these themes (question one)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Phrases or Views</th>
<th>Aspects of midwifery care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice</td>
<td>Advice regarding nutrition, general care lifting, vitamins, diet, morning sickness</td>
<td>Nutrition</td>
</tr>
<tr>
<td></td>
<td>Advice on pregnancy, in all areas</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Advice regarding diet and health</td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td>&quot;second mother&quot;</td>
<td>Maternal and infant care</td>
</tr>
<tr>
<td></td>
<td>Give advice on questions (general) and problems regarding pregnancy</td>
<td>General advisory support</td>
</tr>
<tr>
<td></td>
<td>Offer advice and support on being a mother, personal and infant care</td>
<td>Maternal and infant care</td>
</tr>
<tr>
<td>Information</td>
<td>Information regarding what will happen, expect in pregnancy and labour</td>
<td>Pregnancy, labour and birth</td>
</tr>
<tr>
<td></td>
<td>Guides you with information</td>
<td>Antenatal care, breast feeding</td>
</tr>
<tr>
<td></td>
<td>General information on breast feeding, analgesia, pain</td>
<td>Analgesia, pain</td>
</tr>
<tr>
<td></td>
<td>Give general information about pregnancy, labour, birth, monitor antenatal progress</td>
<td>Pregnancy and labour</td>
</tr>
<tr>
<td>Explain</td>
<td>Explain pregnancy to you - pre, intra and post pregnancy</td>
<td>Different stages of labour</td>
</tr>
<tr>
<td>Assist (help)</td>
<td>Helps with details you want to know in pregnancy</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Helps you all the way in pregnancy</td>
<td>Mother and baby</td>
</tr>
<tr>
<td></td>
<td>Help as a friend</td>
<td>As a friend</td>
</tr>
<tr>
<td></td>
<td>Helps with everything with baby and mother</td>
<td>Maternal and infant care</td>
</tr>
<tr>
<td></td>
<td>Midwife is a friend, assist with problems in pregnancy</td>
<td>As a friend</td>
</tr>
<tr>
<td>Support</td>
<td>Midwives support woman concerning pregnancy</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Support for women in pregnancy and labour</td>
<td>Emotional support</td>
</tr>
<tr>
<td></td>
<td>Provides support, emotional especially primids due to lack of knowledge in pregnancy and child-care</td>
<td>Delivery (intrapartum care)</td>
</tr>
<tr>
<td></td>
<td>Going through delivery (of baby) midwife is there to support you</td>
<td>Physical and emotional support</td>
</tr>
<tr>
<td></td>
<td>Support worker</td>
<td>Support</td>
</tr>
<tr>
<td>Teach</td>
<td>How to look after the baby</td>
<td>Infant care</td>
</tr>
<tr>
<td></td>
<td>Prenatal classes</td>
<td>Antenatal education</td>
</tr>
<tr>
<td></td>
<td>Mothercraft skills</td>
<td>Postnatal education</td>
</tr>
<tr>
<td>Educate</td>
<td>Imparting knowledge in regards to baby, what you would be experiencing in pregnancy procedures relating to childbirth</td>
<td>Pregnancy, infant and childbirth procedures</td>
</tr>
<tr>
<td>Guidance</td>
<td>Guide you during pregnancy</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Guide the pregnant woman through the pregnancy</td>
<td>Delivery</td>
</tr>
<tr>
<td></td>
<td>Guide the first time mother in parentcraft skills</td>
<td>Maternal care</td>
</tr>
<tr>
<td></td>
<td>Practical guidance, what to do</td>
<td></td>
</tr>
<tr>
<td>Answering questions</td>
<td>Answer any questions relating to pregnancy</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Questions and answers regarding pregnancy</td>
<td>Delivery</td>
</tr>
<tr>
<td></td>
<td>Answer all my questions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions regarding pregnancy, ask the midwife if any trouble, see midwife directly</td>
<td>Miscellaneous questions</td>
</tr>
<tr>
<td></td>
<td>Talk with midwife if there are problems...clarify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Answer questions relating to pregnancy during and after pregnancy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Midwife there for questions</td>
<td></td>
</tr>
<tr>
<td>Deliver babies</td>
<td>Deliver baby</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Midwives deliver babies</td>
<td>Assisting with birth</td>
<td></td>
</tr>
<tr>
<td>Assist patient to deliver babies at labour, assist with birth, deliver the baby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actually delivers a baby, has more experience with childbirth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwives do deliver (baby) assist in labour</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge of midwife</th>
<th>Knowledge of midwife in relation to pregnancy and childbirth is on par with a doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwives do more than doctors, more involved with patient throughout pregnancy</td>
<td></td>
</tr>
<tr>
<td>Midwife does what doctors do, more than doctors because it is everyday thing for midwives, more experienced</td>
<td></td>
</tr>
<tr>
<td>Has more experience with childbirth</td>
<td></td>
</tr>
<tr>
<td>If specialist is not there, midwife is basically the doctor</td>
<td></td>
</tr>
<tr>
<td>More qualified in field of birth</td>
<td></td>
</tr>
<tr>
<td>Taking the role of a doctor, especially with no complications</td>
<td></td>
</tr>
<tr>
<td>Thorough knowledge of obstetrics</td>
<td></td>
</tr>
<tr>
<td>Midwife is not medically trained</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assist doctor</th>
<th>Assisting medical personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assist the doctor especially if private patients</td>
<td></td>
</tr>
<tr>
<td>Assist the doctor in labour and pregnancy</td>
<td></td>
</tr>
<tr>
<td>Assist doctors in general care, do with pregnancy, during and after</td>
<td></td>
</tr>
<tr>
<td>Assist doctor in delivery</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Call or contact doctor</th>
<th>Referral and contacting medical assistance in the presence of medical and obstetrical complications or problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors called in only if problems, for e.g. caesarean section, baby stopped breathing</td>
<td></td>
</tr>
<tr>
<td>If complications, they (midwife) would refer to doctor</td>
<td></td>
</tr>
<tr>
<td>If problems, call doctor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liaison person</th>
<th>Liaising person between the doctor and patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle person between the doctor and patient</td>
<td></td>
</tr>
<tr>
<td>Liaise with doctor…..</td>
<td></td>
</tr>
<tr>
<td>Refer to doctor if something is wrong</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Midwife</th>
<th>Participants’ personal views of a midwife</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship, get to know the midwife</td>
<td></td>
</tr>
<tr>
<td>Want the same midwife through pregnancy and labour</td>
<td></td>
</tr>
<tr>
<td>Like a ‘second mother’</td>
<td></td>
</tr>
<tr>
<td>Support worker</td>
<td></td>
</tr>
<tr>
<td>Friendly face at labour and delivery</td>
<td></td>
</tr>
<tr>
<td>Someone you feel comfortable with (adjectives friendly, friend, second mother, support worker)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lack of information and knowledge regarding a midwife</th>
<th>Does not know the role of a midwife</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t know</td>
<td></td>
</tr>
<tr>
<td>No idea</td>
<td></td>
</tr>
<tr>
<td>No contact with midwives</td>
<td></td>
</tr>
<tr>
<td>Never thought about it</td>
<td></td>
</tr>
<tr>
<td>Not sure, all new to me</td>
<td></td>
</tr>
<tr>
<td>No clue</td>
<td></td>
</tr>
</tbody>
</table>
In addition to the themes, major and sub major categories were identified. There were three major and twelve sub categories. The major categories are perception of the role of a midwife, qualification of a midwife and limitation of information and knowledge regarding a midwife. The themes identified were categorised into major and sub major categories by virtue of the similarity in their perception of the role of a midwife. The following table presents the major and sub major categories.

*Table 11 Thematic analysis, major and sub major categories (question one)*

<table>
<thead>
<tr>
<th>Major categories</th>
<th>Sub categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of the role of a midwife</td>
<td>1. midwives deliver babies</td>
</tr>
<tr>
<td></td>
<td>2. relationship with a midwife</td>
</tr>
<tr>
<td></td>
<td>3. source of information</td>
</tr>
<tr>
<td></td>
<td>4. source of support</td>
</tr>
<tr>
<td></td>
<td>5. source of assistance</td>
</tr>
<tr>
<td></td>
<td>6. source of referral</td>
</tr>
<tr>
<td></td>
<td>7. role of a teacher</td>
</tr>
<tr>
<td></td>
<td>8. role of a mediator between the woman and a doctor</td>
</tr>
<tr>
<td>Qualification of a midwife</td>
<td>1. specific training and knowledge of a midwife</td>
</tr>
<tr>
<td></td>
<td>2. limitation of the practise of a midwife</td>
</tr>
<tr>
<td>Limited information and knowledge</td>
<td>1. information regarding a midwife</td>
</tr>
<tr>
<td>regarding a midwife</td>
<td>2. knowledge regarding the role of a midwife</td>
</tr>
</tbody>
</table>
Table 12 Summary of themes, major and sub categories identified by thematic analysis (question one)

<table>
<thead>
<tr>
<th>Major category</th>
<th>Sub category</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of the role of a midwife</td>
<td>1. midwife deliver babies</td>
<td>delivering babies</td>
</tr>
<tr>
<td></td>
<td>2. relationship with a midwife</td>
<td>midwife (as a professional person)</td>
</tr>
<tr>
<td></td>
<td>3. source of information</td>
<td>information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>explain (explanation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>answering questions</td>
</tr>
<tr>
<td></td>
<td>4. source of support</td>
<td>support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>guidance</td>
</tr>
<tr>
<td></td>
<td>5. source of assistance</td>
<td>assist patient</td>
</tr>
<tr>
<td></td>
<td></td>
<td>assist a doctor</td>
</tr>
<tr>
<td></td>
<td>6. source of referral</td>
<td>call or contact doctor</td>
</tr>
<tr>
<td></td>
<td>7. role of a teacher</td>
<td>teach</td>
</tr>
<tr>
<td></td>
<td>8. role of a mediator between the woman and doctor</td>
<td>educate</td>
</tr>
<tr>
<td>Qualification of a midwife</td>
<td>1. specific knowledge and training of a midwife</td>
<td>knowledge of a midwife</td>
</tr>
<tr>
<td>Limitation of information and knowledge regarding a midwife</td>
<td>1. information</td>
<td>lack of information regarding a midwife</td>
</tr>
<tr>
<td></td>
<td>2. knowledge</td>
<td>lack of knowledge regarding the role of a midwife</td>
</tr>
</tbody>
</table>

To recap, thematic analysis was used to analyse the data from the unstructured question number one. The question was to investigate the pregnant woman's perception and description of what a midwife does in relation to helping the pregnant women with her maternity care. From the analysis, three major and twelve sub categories and sixteen themes emerged. This process of analysis identified the pregnant women's perceptions of the role of a midwife, the qualification of a midwife and the limitations of information and knowledge regarding a midwife.
6.5.1.2. Qualitative analysis of answers from question two

Question 2 was a semi structured question. The question is shown below.

"Do you know of any specific thing or things she or he is trained to do to help you with your pregnancy and childbirth? I will show you a list and if you think anything on this is applicable, please indicate the item or items.

"Show prompt card"

The participants were initially requested to express their views/perceptions regarding the specific thing or things that a midwife is trained to assist the pregnant woman in pregnancy and childbirth. The participants were reassured by the researcher that there are no right or wrong answers to this question and they were at liberty to express their views.

Following that, the participants were shown the prompt card with a list of prescribed tasks (Appendix 3). The participants were requested to indicate their choices from the prescribed list.

The answers from the prompt card were quantitatively analysed and presented in Section 6.4.2.1. and Section 6.4.2.2. The method of analysing the qualitative data from the semi structured question two was similar to the analysis in question one by using thematic analysis. By applying the same format, a total of eight themes were identified. In the following table, the themes, phrases, views and aspects of midwifery care that were identified are presented.
Table 13 Themes (eight) identified from phrases and views expressed by the participants, and aspects of midwifery care relating to the themes (question two)

<table>
<thead>
<tr>
<th>Themes</th>
<th>Phrases and views</th>
<th>Aspects of midwifery care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwife delivers babies</td>
<td>Midwife, specialized nurse in childbirth, deliver baby</td>
<td>Delivering babies</td>
</tr>
<tr>
<td></td>
<td>Trained to deliver baby.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deliver your baby</td>
<td></td>
</tr>
<tr>
<td>Qualification of a midwife</td>
<td>Midwife trained to do most things, knows a lot about pregnancy and birth</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Qualified to help pregnant woman through pregnancy and childbirth</td>
<td>Childbirth</td>
</tr>
<tr>
<td></td>
<td>Trained to monitor development of baby determine if complications and advice accordingly</td>
<td>Recognition of complications</td>
</tr>
<tr>
<td></td>
<td>Qualified to do home births independently</td>
<td>Home births</td>
</tr>
<tr>
<td></td>
<td>Specific training (childbirth)</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Information relating to health, need lots of information</td>
<td>Childbirth</td>
</tr>
<tr>
<td></td>
<td>Prepare them (pregnant woman), give information on diet, checking bloods and blood pressure, recommends exercises</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Providing information in preparation for childbirth on diet, after delivery care, during pregnancy</td>
<td>Exercise, antenatal, intrapartal and postpartal care</td>
</tr>
<tr>
<td>Answering question</td>
<td>Answer questions in relation to childbirth all through pregnancy</td>
<td>Childbirth questions</td>
</tr>
<tr>
<td></td>
<td>Help with questions</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Questions relating to childbirth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions regarding stages of pregnancy</td>
<td></td>
</tr>
<tr>
<td>Assist</td>
<td>Always thought midwives assist you in labour</td>
<td>Assistance in labour, by coaching the woman in labour and facilitating comfort in birthing a baby</td>
</tr>
<tr>
<td></td>
<td>Assist you in labour e.g. breathing...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Show me how to breathe, assist you with massage, makes me comfortable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assist in birth of child</td>
<td></td>
</tr>
<tr>
<td>Advice</td>
<td>Health advice relating to pregnancy</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Advice regarding medication, pain relief in labour breathing techniques</td>
<td>Medication, analgesia</td>
</tr>
<tr>
<td>Limitation of the practice of a midwife</td>
<td>Not medically trained, will refer to a doctor if problem</td>
<td>Obstetric or medical complication, referral to a doctor</td>
</tr>
<tr>
<td></td>
<td>Certain boundaries, doctors for complex cases, especially operation</td>
<td>Not licensed to prescribe</td>
</tr>
<tr>
<td></td>
<td>Cannot prescribe medication</td>
<td></td>
</tr>
<tr>
<td>Lack of information and knowledge regarding a midwife</td>
<td>Not sure what midwife does</td>
<td>Lack information and knowledge about the aspects of care provided by a midwife</td>
</tr>
<tr>
<td></td>
<td>Not sure about the functions of midwife</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Didn’t think about it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Don’t know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No idea</td>
<td></td>
</tr>
</tbody>
</table>

The following table displays the major and sub major categories. Similar to question one, the themes were placed into major and sub categories. There
were four major and 5 sub categories. The five categories were linked to the major category of the perception of the role of a midwife.

Table 14 Major and sub major categories identified from thematic analysis (question two)

<table>
<thead>
<tr>
<th>Major category</th>
<th>Sub category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of the role of a midwife</td>
<td>1. midwives deliver babies</td>
</tr>
<tr>
<td></td>
<td>2. source of information</td>
</tr>
<tr>
<td></td>
<td>3. source of assistance</td>
</tr>
<tr>
<td></td>
<td>4. source of advice</td>
</tr>
<tr>
<td></td>
<td>5. resource person</td>
</tr>
<tr>
<td>Qualification of a midwife</td>
<td></td>
</tr>
<tr>
<td>Limitation of the practise of a midwife</td>
<td></td>
</tr>
<tr>
<td>Lack of information and knowledge regarding the role of a midwife</td>
<td></td>
</tr>
</tbody>
</table>

The next table summarised the themes, major categories and sub categories identified from thematic analysis of the qualitative data of question two.
### Table 15 Summary of themes, major and sub categories from thematic analysis (question two)

<table>
<thead>
<tr>
<th>Major categories</th>
<th>Sub categories</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of the role of a midwife</td>
<td>1. midwives deliver babies</td>
<td>Midwives delivering babies</td>
</tr>
<tr>
<td></td>
<td>2. source of information</td>
<td>Information</td>
</tr>
<tr>
<td></td>
<td>3. source of assistance</td>
<td>Assist</td>
</tr>
<tr>
<td></td>
<td>4. source of advice</td>
<td>Advice</td>
</tr>
<tr>
<td></td>
<td>5. resource person</td>
<td>Answering questions</td>
</tr>
<tr>
<td>Qualification of a midwife</td>
<td></td>
<td>Specific training of midwife in maternity care</td>
</tr>
<tr>
<td>Limitation of the practise of a midwife</td>
<td></td>
<td>Midwife has limitation in their practise</td>
</tr>
<tr>
<td>Lack of information and knowledge</td>
<td></td>
<td>Lack of information regarding a midwife and knowledge of the role of a midwife</td>
</tr>
<tr>
<td>regarding the role of a midwife</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In summary, pertaining to the specific thing or things that a midwife is trained to do to assist a pregnant woman in pregnancy and childbirth, the participants identified the main role of a midwife as a professional who delivers babies, a source of information, assistance, advice and a resource person. The specific training of a midwife in childbirth care was identified in this analysis. Other findings included limitation of the practise of a midwife because of their 'non medical' training, the lack of information and knowledge regarding the role of a midwife. Following on in the next section, thematic analysis of the qualitative data from question three is discussed.
6.5.1.3. Qualitative answers from question three

Question three was the second semi-structured question. The question was “Is there anything that you ‘believe’ she / he is not qualified to do for you? I will show you the card (prompt card) again.....”

The format for answering this question is similar to question 2 (Section 6.4.2). A majority of the participants chose to answer this question by selecting or indicating their choice of the task of a midwife from the prescribed list of tasks in the prompt card (Appendix 3). The answers from the prompt card were quantitatively analysed in Section 6.4.2.2.

Analysis of the qualitative data from question three was not performed due to the insufficient qualitative comments from the participants. The investigator observed that the participants were less forthcoming with their comments after realising that the prompt card was an easier option in answering the questions. As a result of this the answers from question three were predominantly quantitative.

6.5.1.4. Summary of qualitative analysis

In summary, thematic analysis was the method used to analyse the qualitative answers from questions one and two, exploring the participants’ perceptions of the role of a midwife. Themes, major, sub categories and midwifery tasks were identified in this analysis. Sixteen themes, three major and twelve sub
categories were identified in relation to the participants’ perceptions of what a midwife does in relation to assisting them with their maternity care.

Thematic analysis identified eight themes, four major and five subcategories regarding specific tasks that a midwife is trained to assist a pregnant woman during pregnancy and childbirth. Demographic details were included to gather demographic information from the participants. The investigator proposed that firstly, participants from different nationalities and those born in Australia may have differences of perception regarding the role of a midwife and; secondly that younger participants may have not have similar perceptions of the role of a midwife with the participants that are older.

6.6 Comparison of perceptions in relation to the role of a midwife

To investigate the first proposition, a group of participants from this sample with a similar profession, which were the managers, were selected. To explore the perceptions of the participants in the second proposition, the youngest and oldest group of participants was nominated.

To explore the perceptions of Australian born participants from those born in other countries, the largest group of participants with a similar profession, the managers, were selected to explore the proposition that participants from a non Australian background may have a different perception of the role of a midwife. In Chapter Two, the variation in midwifery in other cultural settings was described (Sections 2.5.1 to Sections 2.5.6.2). Does ethnicity or nationality of the participants’ influence this perception?
6.6.1. Participants born in Australia and other countries

The managers from the sample were selected based on the assumption that the participants who have a similar profession would have a similar educational background, qualifications and be within a certain age group. Moreover, this group of managers represented the 'biggest' group in the sample with the same profession, educational level, the age were relatively similar and half of this group were not born in Australia.

There were seven participants in this group. Three participants were born in Australia and the other four participants were born in India, China, Philippines and New Zealand.

Two of the seven participants were booked with a private obstetrician and the remaining five participants were booked at the hospital clinic. The mean age of the managers was 28.5 years, mean level of education was 18.7 years and the mean number of years resident in Australia was 16.8 years.

The table below presents the responses from question two and three of the prompt card.
**Table 16** Responses of the managers to question two (trained to do) and question three (not qualified to do) from prompt card²

<table>
<thead>
<tr>
<th></th>
<th>Midwives trained to do these tasks (question 2)</th>
<th>Midwives not qualified to do these tasks (question 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australian Born (n=3)</td>
<td>Born in other Countries (n=4)</td>
</tr>
<tr>
<td><strong>Before birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving antenatal classes on :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancy</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>maternity services</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>maternity benefits</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>childbirth</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>checking growth of baby</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>listening to baby</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>taking blood samples</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>checking blood pressure</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>checking position of baby</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>prescribing medicine</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>checking urine</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>At birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>breech delivery</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>give epidural/anaesthetic</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>normal delivery</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>care in labour</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>forceps delivery</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>ventouse delivery (suction delivery)</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>suturing (stitching)</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>caesarean delivery</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>After birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>postnatal checking of baby and mother</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

From the results shown in Table 16 above, overall there were no statistical significant differences in perceptions of the role of a midwife between participants born in Australia and other countries. But this is not unexpected due to the small sample.

² Frequency counts were presented in this table because percentages are misleading with small sample sizes. Please note that some questions were not answered.
These two groups of participants believed that a midwife is trained and qualified to perform normal deliveries, care in labour and all midwifery related tasks and procedures; and shared similar perceptions, by their responses that a midwife is not trained or qualified to perform medical tasks, caesarean and manipulative deliveries.

The participants born in Australia were more likely to believe that a midwife is not trained or qualified to perform suturing (stitching) as opposed to participants born in other countries. Conversely, the participants born in other countries were more likely to believe that a midwife is trained and qualified to prescribe medicine in comparison to the participants born in Australia.

In summary, a micro analysis of a small sample of women from similar professions but different countries of birth, shows that irrespective of their nationalities, there are no significant differences in their perceptions of the role of a midwife. The participants unanimously believed that a midwife is trained to deliver a baby, care for a woman in labour and perform all maternity related tasks. The Australian born participants believed that a midwife is not trained to perform medical procedures, instrumental and surgical deliveries; and a very small percentage of women born in other countries believed that a midwife is qualified to perform these procedures.
6.6.2. Participants in the oldest and youngest age group

To explore the participants' perceptions from different age groups, the oldest and youngest groups of participants in this survey were selected for comparison. The participants in this survey were classified into several age groups (refer to 6.4.1.3).

The youngest group was in the 17 to 19 years old group and the oldest group was the 35 to 39 years old group. There were ten participants in the oldest group, age ranging from thirty five to thirty nine years with a mean age of 35.9 years. There were seven participants in the youngest group, the ages were ranged between seventeen and nineteen years, with a mean age of 18.8 years. Demographic details of responses to question two and three of these two groups is shown in the following table.
Table 17 Demographic details of the oldest and youngest group

<table>
<thead>
<tr>
<th></th>
<th>35-39 years</th>
<th>17-19 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
<td>35.9 years</td>
<td>18.8 years</td>
</tr>
<tr>
<td>Mean age when they left full time education</td>
<td>18.3 years</td>
<td>16.2 years</td>
</tr>
<tr>
<td>Mean length of years in Australia</td>
<td>9.2 years</td>
<td>12 years</td>
</tr>
<tr>
<td>Country of birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Australia</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>- Others</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80% married</td>
<td></td>
<td>42 % married</td>
</tr>
<tr>
<td>20% living with partner</td>
<td></td>
<td>29% living with partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29% single</td>
</tr>
<tr>
<td>Accommodation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60% home owners</td>
<td></td>
<td>10% home owners</td>
</tr>
<tr>
<td>30% renting privately</td>
<td></td>
<td>45% renting privately</td>
</tr>
<tr>
<td>10% boarding with parents</td>
<td></td>
<td>45% boarding with parents</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80% full time</td>
<td></td>
<td>28.5% full time</td>
</tr>
<tr>
<td>10% part time</td>
<td></td>
<td>28.5% part time</td>
</tr>
<tr>
<td>10% unemployed</td>
<td></td>
<td>28.5 unemployed</td>
</tr>
<tr>
<td>Worked since leaving school</td>
<td>Yes 100%</td>
<td>Yes 100%</td>
</tr>
<tr>
<td>Access to telephone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80% phone</td>
<td></td>
<td>Yes 100%</td>
</tr>
<tr>
<td>10% mobile only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% no access to phone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 18 Responses of the oldest and youngest groups to question two (trained to do) and question three (not qualified to do) in the prompt card

<table>
<thead>
<tr>
<th>Age group</th>
<th>Question 2 (trained to do)</th>
<th>Question 3 (not qualified to do)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35-39 yrs</td>
<td>17-19 yrs</td>
</tr>
<tr>
<td><strong>Before birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving antenatal advice on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pregnancy</td>
<td>100</td>
<td>86</td>
</tr>
<tr>
<td>maternity services</td>
<td>90</td>
<td>86</td>
</tr>
<tr>
<td>maternity benefits</td>
<td>50</td>
<td>57</td>
</tr>
<tr>
<td>childbirth</td>
<td>100</td>
<td>71</td>
</tr>
<tr>
<td>checking growth of baby</td>
<td>90</td>
<td>86</td>
</tr>
<tr>
<td>listening to baby</td>
<td>100</td>
<td>71</td>
</tr>
<tr>
<td>taking blood samples</td>
<td>80</td>
<td>71</td>
</tr>
<tr>
<td>checking blood pressure</td>
<td>100</td>
<td>71</td>
</tr>
<tr>
<td>checking position of baby</td>
<td>100</td>
<td>43</td>
</tr>
<tr>
<td>prescribing medicine</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>checking urine</td>
<td>70</td>
<td>57</td>
</tr>
<tr>
<td><strong>At birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>breech delivery</td>
<td>50</td>
<td>29</td>
</tr>
<tr>
<td>give epidural/anaesthetic</td>
<td>20</td>
<td>57</td>
</tr>
<tr>
<td>normal delivery</td>
<td>90</td>
<td>71</td>
</tr>
<tr>
<td>care in labour</td>
<td>90</td>
<td>86</td>
</tr>
<tr>
<td>forceps delivery</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>ventouse delivery (suction delivery)</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>suturing</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>caesarean section</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td><strong>After birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>postnatal checking of baby and mother</td>
<td>100</td>
<td>71</td>
</tr>
</tbody>
</table>

The participants in the older group believed that a midwife is qualified to deliver a baby normally, perform postnatal checking of baby and mother, and perform a series of maternity related tasks. Both groups equally believed that a midwife is trained to care for a woman in labour. The two groups believed
that a midwife is not qualified to perform medical related procedures like prescribing medicine and inserting an epidural block, instrumental and operative deliveries. The participants in the older group were more likely to believe this than those in the younger group.

Chi square test with Yeates correction factor for small sample cell sizes were used in this analysis. The findings show that in the 35 to 39 years age group, the participants unanimously (100%) believed a midwife is trained to give antenatal advice on pregnancy (p is NS), childbirth and postnatal checking of baby and mother (p<0.07), in comparison to a marginally smaller percentage of participants in the younger group sharing this belief. Ninety percent (90%) of the participants in the older group believed that a midwife is trained to deliver a baby normally, in comparison to seventy one percent (71%) stating this belief (p is NS).

The participants in both groups stated by the results that they believed a midwife is not qualified to prescribe medicine, perform a caesarean section, manipulative deliveries like forceps and suction delivery and inserting an epidural block.

Seventy percent (70%) of the participants in the older group stated that a midwife is not qualified to perform caesarean section in contrast to a response of forty three percent (43%) in the younger group. Seventy percent (70%) of the participants in the older group believed that a midwife is not qualified to

3 Not Significant

166
perform instrumental deliveries and medical procedures. An average of forty three percent (43%) in the younger group have this perception.

A larger percentage of the participants in the older group believed that a midwife is not trained or qualified for medically oriented procedures like caesarean, forceps and ventouse deliveries. The participants in the younger group believed that a midwife is trained to deliver a baby, care for a woman in labour and give antenatal advice on maternity services. A small ten percent (10%) of the participants in the older age group believed that a midwife is not trained to care for a woman in labour, delivering a baby normally, to give antenatal advice on maternity services, or in taking blood samples and checking urine.

All the participants in the 35–39 years age group believed that a midwife is qualified to perform postnatal checking of a baby and mother, whilst fourteen percent (14%) in the younger age group believed that a midwife is not trained to do this. Participants in the 35-39 years age group believed that a midwife is qualified to suture (60%). This is statistically significant at p<0.01.

In summary, from this small 'sub sample', there was only a marginal difference in the perceptions of the participants in the older and younger groups. These differences may have been attributed to the age of the participants.
6.7. Conclusion

In conclusion, this chapter presented the results of the quantitative and qualitative analysis of data gathered in this survey. Two methods of analysis were used. Quantitative analysis using descriptive statistics was used to analyse the quantitative data and the results were presented in charts, figures and tables. Coding of the listed prescribed tasks on the prompt card and the format of the questionnaire were discussed. The lower and upper limits of 95% confidence interval (CI) were calculated for the individual means of each listed prescribed tasks in the prompt card. The statistical significance was set at 0.05 level of significance.

Quantitative data analysis revealed that a majority of the participants believed a midwife is trained and qualified to deliver babies normally (vaginal delivery), care for a pregnant woman in labour and perform midwifery related tasks like giving antenatal advice, maternity services, benefits, childbirth, checking position of a baby and postnatal care. The participants clearly stated that a midwife is not trained or qualified to perform medical or surgical related procedures, manipulative deliveries and caesarean deliveries.

A significant number of participants correctly identified these procedures. They are caesarean delivery, forceps and ventouse (suction) delivery, breech delivery, inserting an epidural anaesthesia and prescribing medicine. All these tasks are the specific responsibilities of a specialist medical officer. One of the significant responses relating to these procedures is caesarean delivery. This was demonstrated in that the percentage of women who believed that
midwife is not qualified to perform a caesarean section was at an impressive 79.6% (95% CI 72% to 87%) in contrast to 9% (95% CI 4% to 14%) who believed that a midwife is qualified to perform this surgical procedure (p<0.05). Perchance that the finding is incorrect, this would be in the ratio of 5 in 100 participants.

Results from thematic analysis of the qualitative data exploring participants’ perceptions and beliefs of what a midwife is trained and qualified to do substantiated the findings from quantitative analysis. Thematic analysis confirmed the findings that participants believed a midwife has specific training and knowledge in maternity care. The participants perceived the role of a midwife as a health professional who is qualified to deliver babies and provide maternity care to pregnant women. A midwife is a source of information, assistance, education, support, advice, referral, guidance in relation to pregnancy and childbirth. A midwife is a mediator between a doctor and woman, a source of referral and a teacher of childbirth care.

The participants identified limitations to the practise of a midwife. A midwife is limited to performing non-medical, midwifery related tasks by virtue of the ‘non medical’ training of a midwife. The participants stated that midwife should consult or call for medical assistance in the event of medical or obstetric complications.

This limitation is a result of their non medical training and therefore, the midwife is professionally responsible for referring problems or complicated
maternity cases to the medical personnel. These findings were similar to the findings identified in quantitative analysis. The participants did not believe that a midwife is trained or qualified to prescribe medicine, insert an epidural block, perform caesarean, forceps or ventouse (suction) deliveries. In both analyses, the participants were ambivalent in their perception of whether a midwife is trained or qualified to perform suturing.

Thematic analysis also revealed that there was a lack of information and knowledge regarding the role of a midwife. The participants either had no prior knowledge or were unsure of what a midwife is trained or qualified to do for a pregnant woman in pregnancy and childbirth.

To conclude, quantitative results were supported by the results from qualitative analysis confirming that a midwife is trained and qualified to perform normal deliveries, midwifery tasks, and not qualified to perform medical procedures, operative and manipulative deliveries. Chapter Seven, the final chapter of this thesis, will provide a summary, discussion of results and comparison with other studies, limitations of the study and a recommendation for further studies.
Chapter Seven: Summary, discussion and conclusion

7.1 Summary

In summary, the main purpose of this study was to explore the childbearing women's perceptions of the role of a midwife in Australia. The second purpose of the study was to compare the results of this study with the findings by Leach et al (1998).

There was a lack of Australian studies exploring the childbearing women's perceptions of the role of a midwife and the investigator was interested in exploring these perceptions in Australia. The investigator aimed to bridge a gap in information in Australia, to validate and add to the existing information and knowledge on this subject. A literature review on this subject revealed that most of the information and research exploring the midwifery role came from the United Kingdom and the Netherlands.

A replication of the study conducted in England was chosen because the National Health System in the United Kingdom and Medicare (public health system) in Australia provide public health care to the residents of the country. There were options for the residents to choose private health care cover. Therefore, the health care system in both countries (Australia and United Kingdom) are similar.

The investigator had originally intended to replicate the study conducted by Luanaigh (1995) in England exploring women's perceptions of the role of a
midwife. His sample were recruited from first time pregnant women (primigravidas) and this was the investigator's intention to investigate first time pregnant women's perceptions of the midwifery role. The investigator shared Luanaigh's view that primigravidas were selected based on the assumption that these women's knowledge of the midwifery profession and services would be limited and therefore excluding external bias or influences. Due to unsuccessful attempts at contacting the aforementioned researcher, an alternative study was selected. The study by Leach et al (1998) was chosen because the study investigated women's perceptions of the role of health professional providing maternity care. This was the aim of the investigator, to explore women's perceptions specifically the midwife, who is one of the health professional providing maternity care.

The study by Leach et al (1998) conducted in Leeds, the United Kingdom was commissioned by the Northern Yorkshire Regional Health Authority to investigate women's perceptions of the role of the different health professionals providing maternity care. The three main health professionals involved in this study were the midwives, the general practitioners and the obstetric consultants. The women were a combination of first time pregnant women (primigravidas) and women who have been pregnant more than once. A partial replication of the study was conducted to investigate childbearing women's perceptions of the role of a midwife in Australia. Perceptions of the role of the general practitioners and obstetric consultants were not included in this current study.
A survey using a partial replication of the questionnaire by Leach et al (1998) was conducted at Westmead Hospital in the Western Sydney Area Health Service. The recruits were a sample of first time pregnant women (primigravidas) who booked in for confinement at Westmead Hospital. This sample consisted of private and public (clinic) classified patients. A final sample of 108 participants was recruited for this study.

The investigator suspected that the childbearing women in Australia perceive the midwife’s role differently from their European counterpart. In Europe, the women predominantly perceive a midwife as the key health personnel who delivers babies, provides care in labour and monitors the women’s pregnancy.

The investigator’s suspicion was formed as a result of numerous encounters with pregnant women (in Australia) who were in labour, who frequently enquired and requested the attendance of a doctor for the delivery of their babies. These requests were presented irrespective of the midwives’ proven, demonstrated, proficient and competent intrapartum care given to the pregnant women, their partners and families. These requests were not exclusively made by any specific ethnic, socio-economic or age group. They were generally across a broad section of pregnant women in labour. Why do these pregnant women request a doctor at the time of delivery? How do these pregnant women really perceive the role of a midwife?

This suspicion that the pregnant women perceive the midwife’s role differently in Australia from their counterparts in Europe was a view shared by some of
the investigator's colleagues. The investigator received her general nurse and midwifery training in the United Kingdom, practised as a midwife in the United Kingdom for several years and has practised as midwife in Australia for more than a decade. Therefore, the investigator has provided maternity care to pregnant women in the United Kingdom and in Australia; and noted that there seemed to be a considerable difference in the perception of the role of a midwife by the pregnant women between these two countries.

The investigator postulated that the perceived difference might have been attributed to the different health care system, the "traditionally established midwifery role" and practise and community perceptions of the role of a midwife in the European countries. Midwives in most European countries were accepted and respected by their communities and pregnant women as the health professionals caring for pregnant women and delivering their babies. As previously mentioned, the health care system in the United Kingdom and Australia are similar.

Quantitative analysis using descriptive statistics and thematic analysis was used to analyse the qualitative data obtained in this survey. Analysis and interpretation of the results were discussed in Chapter Six and the following section will present a discussion of the findings from this study. Comparison of results with the study by Luanaigh (1995) and Leach et al (1998) are highlighted.
7.2. Discussion

In this section, key findings from this study are discussed. In the discussion, the various types of accoucheurs attending to normal vaginal deliveries at Westmead Hospital and demographics of childbearing women in Western Sydney Health Area are highlighted. Following this, a comparison of results with the studies by Leach et al (1998) and Luanaigh (1995) are discussed.

7.2.1. Perceptions of the pregnant women

A majority of the participants from this study were clear about the role of a midwife in providing midwifery care to pregnant women. The results from this study demonstrated that the participants, representing a portion of the Australian women, overwhelmingly believed a midwife is qualified to deliver a baby normally, care for a woman in labour and attend to all midwifery related tasks throughout pregnancy, labour and after delivery of a baby. As mentioned in Section 6.4.1.11, a majority of the participants (45.3%) were born in Australia. The investigator's suspicion and view that childbearing women in Australia perceived the role of a midwife differently from their European counterparts were not supported by the findings from this study. The participants significantly and clearly identified and believed that a midwife is qualified to perform normal deliveries and a majority of the midwifery tasks throughout a woman's pregnancy.

This significant finding was clearly demonstrated by the responses of 88% participants stating that they believed a midwife is qualified to deliver babies
normally in contrast to only 5.5% responding that a midwife is not qualified to deliver a baby normally. A midwife is specifically trained and qualified to deliver babies and provide maternity care (WHO, 1976 cited in ACMI, 1989).

Following findings from this survey which showed that a significant percentage of participants perceived that a midwife is qualified to deliver babies, how would that serve to answer the questions of pregnant women at the investigator’s clinical area requesting for the presence of a doctor for delivery of babies?

7.2.2. Total births and normal vaginal deliveries by accoucher at Westmead Hospital

At Westmead Hospital, there were four thousand three hundred and twenty eight (4328) deliveries in 1998. Two thousand nine hundred and fifty one (2951) of these deliveries were normal vaginal deliveries and one thousand seven hundred and ninety one (1791), that is 60.7%, of these babies were delivered by midwives. Similarly in 1999, four thousand four hundred and one deliveries (4401) were recorded. From this total, two thousand eight hundred and eighty six (2886) were normal vaginal deliveries. Midwives delivered one thousand eight hundred and thirty seven (1837), representing 63.7%, of these normal vaginal deliveries (Westmead Hospital Clinical Information System, 2000). This demonstrated that a significant percentage of normal vaginal deliveries were performed by midwives. This is reflected in the findings from this study where eighty eight percent (88%) of the participants stated that a midwife delivers babies normally.
The following figure and table illustrate the total births and normal vaginal deliveries by accoucher at Westmead Hospital in 1998 and 1999.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>4328</td>
</tr>
<tr>
<td>1999</td>
<td>4401</td>
</tr>
</tbody>
</table>

Table 20 Normal vaginal deliveries by accoucher in 1998 and 1999

<table>
<thead>
<tr>
<th>Accoucher</th>
<th>1998</th>
<th>%</th>
<th>1999</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified midwife</td>
<td>1791</td>
<td>60.70%</td>
<td>1837</td>
<td>63.70%</td>
</tr>
<tr>
<td>O&amp;G Registrar</td>
<td>44</td>
<td>1.50%</td>
<td>67</td>
<td>2.30%</td>
</tr>
<tr>
<td>Visiting Medical Officer (VMO)</td>
<td>510</td>
<td>17.30%</td>
<td>486</td>
<td>16.80%</td>
</tr>
<tr>
<td>Resident doctor</td>
<td>75</td>
<td>2.50%</td>
<td>60</td>
<td>2.10%</td>
</tr>
<tr>
<td>Student midwife</td>
<td>440</td>
<td>15.00%</td>
<td>370</td>
<td>12.80%</td>
</tr>
<tr>
<td>Other (medical student, born before arrival)</td>
<td>91</td>
<td>3.00%</td>
<td>6</td>
<td>2.30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2951</strong></td>
<td><strong>100%</strong></td>
<td><strong>2886</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

7.2.3. Presence of a doctor at delivery

The perception by pregnant women that a doctor has to be present or called to deliver a baby vaginally might have been confined to the views or perceptions of a minor group of women. Perhaps pregnant women are more anxious with the imminent delivery of the baby than they were during their labour, may want the most qualified person to be present at the delivery of the baby, with the assumption that a doctor is more qualified than a midwife to attend to the delivery of the baby.
Table 20 showed that at Westmead Hospital, midwives performed more than 60% of normal deliveries in comparison to the obstetric and gynaecology registrar (2%), visiting medical officer (17%) and the resident medical officer (2%). So why do these pregnant women in labour request a doctor as the delivery of the baby approaches? Evidently, this perception was not limited to women at the investigator's clinical area in Australia.

7.2.3.1. Comparison with study by Ong, Lim and Sabapathy (1997)

In order to consider other cultural perceptions of the midwife's role in relation to this study, the proximity of Singapore to Australia was taken into consideration and the study by Ong, Lim, and Sabapathy (1997) was again reviewed. Ong, Lim, and Sabapathy (1997) reported from their study in Singapore, exploring the childbearing women's perceptions of the midwife's role in intrapartum care and delivery of the baby, stated that whilst women were generally happy with the midwives' competence and skills, they noted that there was a 'need' to be cared for by a medical practitioner (an obstetrician) and they suggested this could be attributed to the women's lack of information regarding the role of the midwife as experts in normal midwifery care.

The study by Ong, Lim, and Sabapathy (1997) was conducted in an Asian country, therefore the recruits were predominantly of Asian origin. Perhaps women from different ethnic origins have different perceptions of the role of a midwife and this might have contributed to the investigator's perception that childbearing women in Australia perceive the role of a midwife differently from
their European counterparts, given that the midwifery role is essentially similar.

7.2.3.2. Effects of ethnicity

Westmead Hospital located in the Western Sydney Health Area has a multiethnic composition by virtue of the historical evolvement of migration and development in the western suburbs of Sydney (refer to Section 4.2.). State wide in NSW, eighty percent (80%) of births in 1998 were birthed by women born in English speaking countries, 10.1% were born to women from Asian countries and 4.3% were born to women from the Middle East or Africa. The proportion of women from Asian countries has increased from 9.2% in 1994 to 10.1% in 1998 (NSW Public Health Bulletin Supplement, 1998).

In 1998, in the Western Sydney Area women born in non English speaking countries was 35.3%. There were 64.6% births born to women from English speaking countries, 17.3% births born to women from Asian countries and 9.8% births to women from the Middle Eastern and Africa countries. Recently, there has been an increasing number of women from Asia birthing in NSW and this was stabilised in 1998 (NSW Public Health Bulletin Supplement, 1998).

As shown in chart 8, the participants in this survey reflected the multi-ethnicity of the Western Sydney Health area. Forty six point nine percent (46.9%) of the participants in this survey were born in Australia and the rest of the participants (53.1%) were born overseas, with a mean length of 9.0 years'
stay in Australia at the time of the survey interview. The overseas born participants were predominantly from non English speaking countries.

In this survey, the languages prepared by translating the prompt card into Mandarin, Cantonese, Arabic, Turkish and Farsi were fairly well matched to the nationalities of the women living in the Western Sydney Area in terms of the participants from Asian and Middle Eastern countries. In comparison to the Western Sydney Area, the sample in this survey showed that the participants are representative samples of the population in Western Sydney Health Area. The investigator observed that ten of the participants who declined to participate in the survey were from Asia and the Mediterranean countries. This observation was relayed to the investigator’s midwifery colleagues working in the antenatal clinic. Their anecdotal comments regarding these women’s reluctance to participate suggested this could be due to cultural influences, especially for the Asian women who remained quiet, leaving the conversation to the male folks or the possible evasion of immigration related problems by keeping a low profile. For these and other reasons, a survey is treated with suspicion as it could be a possible invasion of their privacy.

A micro analysis of the perceptions of participants sharing similar profession, age and educational level but from different countries of birth did not show any evidence that their perceptions are different from each other. Regardless of the country of origin, women from different countries of origin have similar
perceptions of the role of a midwife. In this study, ethnicity did not influence the participants' perception of the role of a midwife.

In Singapore, Ong, Lim, and Sabapathy (1997) reported that the women in their study (predominantly Asian women), irrespective of their confidences in a midwife's skills and knowledge have a need to be cared by a doctor. The investigator of this current study observed that pregnant women in labour requesting the presence of a doctor was not specific to women in Australia. The finding from this study did not concur that ethnicity influenced the participants' perceptions regarding the role of midwife.

7.2.3.3. Effects of age

As previously mentioned in Section 7.2.3., perhaps how these pregnant women feel during labour and at the delivery of the baby are influenced by their age. The findings from this survey showed that the age of a woman has a minor influence on the perceptions of the role of a midwife. Participants in the older age group differed marginally in their perceptions of the role of a midwife in comparison to participants in the younger age group. Women in the older age group were more likely in comparison to the younger group of women, to believe that a midwife is qualified to provide maternity care in the antenatal, intrapartum and postnatal period and deliver a baby normally. Similarly, these same group of women were more likely to believe that a midwife is not qualified to perform medical procedures, manipulative and caesarean deliveries.
In 1998, the confinements by maternal age in Western Sydney Area were four point seven percent (4.7%) in the twelve to nineteen years age range, seventeen point six percent (17.6%) ranged between twenty to twenty four years, thirty four point four percent (34.4%) in the twenty five to twenty nine years age range, twenty eight point two percent (28.2%) were aged between thirty and thirty four years, twelve point seven percent (12.7%) were in the thirty five to thirty nine years age range, two point three percent (2.3%) were ranged between forty and forty four years of age (NSW Public Health Bulletin Supplement, 1998).

A majority of the confinements by maternal age in Western Sydney Area were women ranged between twenty five and twenty nine years of age, with the next biggest group in the thirty to thirty four years age range. The demographic detail analysis and findings from this study revealed a correlation and similar trend to the demographics from Western Sydney Area. In comparison to the Western Sydney Area, a similar ‘bell shaped curve’ in this study corresponded a similar high percentage of participants ranged between twenty five and twenty nine years of age and the next biggest group in the thirty to thirty four years age range, who booked for confinement. The largest percentage of women booked to have their babies were aged between twenty five and twenty nine years of age, which is comparable with the Western Sydney Health Area figures, NSW Public Health Bulletin Supplement (1998). This showed that the participants were a representative sample from the Western Sydney Area.
7.2.4. Role of the midwife

The results from this study also revealed a significant recognition and perception of the role of a midwife providing antenatal, intrapartum and postnatal services. A large percentage of participants stated that a midwife is trained to provide care in labour (93%), give antenatal advice on childbirth (91.6%), perform postnatal checking of baby and mother (90.7%), give antenatal advice on pregnancy (88.8%) and perform normal deliveries (88%). As mentioned in Section 2.2, the WHO (1996) stated that midwives are the most appropriate healthcare provider for the care of normal pregnancy and birth.

These findings supported the findings by Leach et al. (1998) and Robinson (1985) in the United Kingdom, reaffirming that midwives were responsible for much of the maternity care given to childbearing women. The study by Robinson (1985) to examine the role and responsibilities of the midwife revealed that midwives were responsible for a significant proportion of antenatal, intrapartum and postnatal care provided for childbearing women. This study significantly identified that a midwife is eminently responsible for providing maternity care in these three areas. The perceptions of the role of a midwife in Australia are similar to the perceptions of the pregnant women in the United Kingdom.

Overriding themes describing what a midwife does in relation to assisting a pregnant woman identified in this study were: giving advice, information, explanation, assistance, support, teaching, education, guidance, answering
questions, delivering babies, having midwifery knowledge, providing assistance to a doctor, and acting as a liaison person between the doctor and pregnant woman.

The themes identified reflected on the diverse and specific knowledge and expertise of a midwife. Bluff and Holloway (1994) found that women trusted midwives because they were perceived to be experts who 'know best' because of the midwife's professional knowledge. And this knowledge is essential to providing a vital contribution to the relationship between the midwife and pregnant woman.

In the United Kingdom, Bluff and Holloway's (1994) qualitative study examining women's birth and labour experience revealed that the participants and their partners accepted the knowledge and competence of the midwives. The women and their partners acknowledged that the midwives could offer expert assistance and this acknowledgement of the midwives' expertise placed them in a position of authority to make decisions about drugs, procedures and types of midwifery care. The participants in this survey have a positive view of the role of a midwife in relation to midwifery care and trusted in the knowledge and competence of the midwife.

7.2.4.1. Relationship between the midwife and pregnant woman

This perception of a midwife’s role will determine the direction of the midwife and pregnant woman’s relationship. In a study to explore midwives’ understanding of the influences which may affect the development of
therapeutic relationships between midwives and clients, McCrea and Crute (1991) found that the value and nature of the role of a midwife was one of the factors which will determine midwife and client relationship. McCrea (1993) stated that unique role of the midwife is to provide assistance and help to childbearing women.

7.2.4.2. Partnership between the midwife and pregnant woman

The investigator perceived the relationship between the midwife and the pregnant woman is a partnership. This partnership is based on mutual interest in the wellbeing of a pregnant woman and positive outcome of the pregnancy. The midwife has the specific midwifery expertise and the knowledge to provide maternity services for a pregnant woman. The findings from this study revealed that the participants valued the role of the midwife in this partnership with the pregnant woman.

Verbatim comments by the participants describing the relationship, the knowledge, expertise and involvement of a midwife in this partnership are presented as follows. In regard to the relationship with a midwife, comments included the following:

- relationship... get to know the midwife
- midwife...like a second mother
- midwife is a friend, assist with problems in pregnancy
- friendly face in labour and delivery.
The knowledge and expertise contributed by a midwife in the relationship with a pregnant woman is described in the following manner:

(midwife) actually delivers a baby, has more experience... with childbirth
antenatal care...give general information about pregnancy, birth and labour. In labour, help you through labour, monitor progress, liaise with doctor. Postnatally, (midwife) advice regarding breast feeding etc.
knows stages of pregnancy and labour, what happens to mother during pregnancy and childbirth and help with problems relating to pregnancy and childbirth
answer questions relating to pregnancy during and after pregnancy

The involvement of the midwife in the midwife and pregnant woman’s relationship is described as follows:

taking the role of a doctor, especially with no complications
helps with everything with baby and mother
midwives support woman concerning pregnancy
someone you feel comfortable with.

In reality, this mirrors the relationship between a midwife and a pregnant woman. The maternity needs of a pregnant woman are diverse throughout her
pregnancy. This requires the midwife and pregnant woman to participate and work together in achieving optimal maternity care for the pregnant woman. As mentioned in page three, this was the underpinning philosophy of this thesis with regard to the relationship between the pregnant woman and midwife. It is a partnership between these two people. The midwife working in each specific midwifery clinical area is able to provide the specific needs of the woman at different stages of her pregnancy, labour and after delivery of the baby. If pregnant women were fully informed and aware of the role of a midwife in maternity care, they could make informed choices regarding their pregnancy care.

7.2.4.3. Support provided by the midwife

Support was one of the overriding themes which emerged from this study. The participants in this study believed that a midwife provides a constant source of support. The participants perceived a midwife to provide emotional and physical support in pregnancy and labour. A reason cited for needing this support was the lack of knowledge in pregnancy and child care because of their first time pregnancies. Support was a strong theme identified in a study by Ong, Lim and Sabapathy (1997). The context of support in their study was in emotional, informational, tangible (physical) and social support (refer to Section 3.7).

Therefore, the study had similar findings to those from the study by Ong, Lim and Sabapathy (1997). Pregnant women in these two countries shared similar
perceptions of the role of a midwife in providing emotional and physical support.

7.2.4.4. Lack of knowledge and information about the role of a midwife

Most participants in this study were able to identify and describe the role of a midwife. Whilst most participants were well informed and able to state the role of a midwife, there was a proportion of participants who did not know or were not sure what a midwife did in relation to maternity care. Some of the verbatim answers given by the participants included the following:

- no contact with midwives
- never thought about it (a midwife's role)
- not sure, all new to me
- don't know, no clue

A similar report was given by Zadoroznyi (2000) who stated that there was a lack of knowledge regarding the role of a midwife and this was due to a lack of information explaining what a midwife is capable of doing. Zadoroznyi (2000) explained that a woman's main source of information regarding maternity care was acquired through the actual experience of midwifery led care, particularly in giving birth to a baby. Therefore, the work of a midwife remains largely silent and unnoticed by a woman who is pregnant for the first time. This finding by Zadoroznyi (2000) supported and substantiated the investigator's rationale for selecting primigravidas for this survey, based on the assumption that primigravidas have a limited or no prior knowledge of
maternity services or the role of a midwife. Therefore, the perception of the first time pregnant (primigravida) would present a more 'accurate' assessment of the perceptions of pregnant women.

Women's lack of information and knowledge of the role of a midwife was similarly reported by Ong, Lim, and Sabapathy (1997). They recommended that the public should be given information regarding the role of a midwife and it was necessary to publicise and educate the community regarding the role of a midwife. This recommendation was echoed by Zadoroznyi (2000).

So, why is there a persistent lack of knowledge and information regarding the role of the midwife? What sort of information do these women require and how would this information benefit them and influence their perception of the role of a midwife and choice of maternity?

This investigator agrees with Ong, Lim and Sabapathy (1997) and Zadoroznyi (2000) that the public should be given information regarding the role of a midwife and to publicise this role. In the following section, a comparison of results with the findings by Leach et al (1998) and Luanaigh (1995) is discussed.

7.2.5. Comparison of results

Non parametric statistic using chi square ($X^2$) measure with one degree of freedom was used to compare the relevant percentages when comparing results with the studies by Leach et al (1998) and Luanaigh (1995), (Dempsey & Dempsey, 1992).
7.2.5.1. Comparing results with the study by Leach et al (1998)

The study by Leach et al (1998) recruited two hundred and forty seven (247) participants. That included participants who had more that one pregnancy (multigravidas) who had utilized maternity services, had previous contact and experience of maternity care with a midwife or obstetrician. This current study had a sample size of one hundred and eight (108) participants. The sample differed between these two studies. The sample in this study was limited to participants who were pregnant for the first time (primigravidas). The mean ages in both studies are similar. In Leach et al (1998), twenty eight point six (28.6) years and twenty seven point (27.4) years in this study. In both studies, the participants were able to identify the role of a midwife in maternity care.

7.2.5.1.1. Tasks that a midwife is qualified to perform

In comparison to the study by Leach et al (1998), there was a marked difference in the percentage of participants who believed that a midwife is trained to deliver a baby normally. Eighty eight percent (88%) of the first time pregnant participants in this study believed that a midwife is trained to deliver a baby normally, which was significantly more than fifty seven point one percent (57.1 %) of the participants in the study by Leach et al (1998), ($X^2=32.2$, $p<0.001$).

In comparison to the study by Leach et al (1998), the participants in this study were more likely to believe that a midwife is qualified and trained to deliver a baby normally. This revealed that most women who have not utilized
maternity services and care perceived midwives to be qualified in delivering babies normally. This may suggest that first time pregnant women were more likely to identify the role of a midwife as the health personnel qualified to deliver a baby normally.

In this study, ninety percent (90%) of the participants stated that a midwife is trained to give information and advice on pregnancy and childbirth in comparison to fifty four point seven percent (54.7%) in the study by Leach et al (1998), ($X^2 = 32.2, p<0.001$). Ninety percent (90%) of the participants in this study compared to forty eight percent (48%) by Leach et al (1998) stated that a midwife is qualified to provide postnatal care of mother and baby, ($X^2 = 32.2, p<0.001$). Statistically, there is a significant difference in the percentages between two studies, which provides the conclusion that the pregnant women in this study were more likely to identify a midwife to give information and advice on pregnancy and childbirth and to provide postnatal care of mother and baby than the women in the study by Leach et al (1998).

Sixty four percent (64%) in study by Leach et al (1998) and fifty five percent (55%) of the participants in this study stated that a midwife is qualified to give advice on maternity benefits, ($X^2 = 32.2, p<0.13$). The participants, ninety percent (90%) and eighty two percent (82%) in Leach et al (1998) and this study respectively stated that a midwife is qualified to check on the growth of the baby, ($X^2 = 32.2, p<0.13$ and 0.08 respectively). There is no marked difference in the percentages, indicating that the pregnant women in both studies identify and believed that a midwife is qualified to perform the above mentioned tasks.
7.2.5.1.2. Tasks that a midwife is not qualified to perform

The participants in both studies overwhelmingly stated that a midwife is not qualified to perform a caesarean (operative delivery) section. A large percentage of the participants, seventy nine percent (79%) by Leach et al. (1998) and seventy nine point six percent (79.6%) from this study stated that they believed a midwife is not qualified to perform a caesarean section, ($X^2=32.2$, $p<0.001$). There is no significant difference in these percentages, indicating that the women equally believed and identify that a midwife is not qualified to perform this procedure.

Fifty seven percent (57%) in this study compared to thirty percent (30%) by Leach et al. (1998) believed a midwife is not trained to perform a breech delivery, ($X^2=32.2$, $p<0.001$). Sixty two percent (62%) of the participants in this study believed that a midwife is not trained to perform forceps delivery in contrast to forty two percent (42%) by Leach et al. (1998), ($X^2=32.2$, $p<0.001$).

Sixty three percent (63%) in this study stated a midwife is not qualified to perform a ventouse (vacuum) delivery in comparison to forty two percent (42%) by Leach et al. (1998), ($X^2=32.2$, $p<0.001$).

There were statistically significant differences in the percentages relating to caesarean, breech, forceps and ventouse deliveries between these two studies, ($X^2=32.2$, $p<0.001$). Chi-square ($X^2$) measure with one degree of freedom allowed for the conclusion that there are significant differences in the
pregnant women's perceptions of the role of a midwife in the aforementioned deliveries, between the study by Leach et al (1998) and this study.

The pregnant women in this study are more likely to believe that a midwife is not trained to perform these deliveries. The pregnant women in this study are more knowledgeable and able to identify the midwife's role pertaining to these deliveries. Although lack of knowledge and information was one of the themes identified in the qualitative analysis in this study, the pregnant women were more knowledgeable than the women in the study by Leach et al (1998). A summary of the comparison is presented in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Leach et al (1998)</th>
<th>This study (2001)</th>
<th>$X^2$ test P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>Primigravidas and multigravidas</td>
<td>Primigravidas only</td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td>247</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>Mean age of participants</td>
<td>28.6</td>
<td>27.4</td>
<td></td>
</tr>
<tr>
<td><strong>Midwife trained to perform these tasks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal delivery</td>
<td>57.10%</td>
<td>88.00%</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Information and advice about pregnancy and childbirth</td>
<td>54.70%</td>
<td>90.30%</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Postnatal care of mother and baby</td>
<td>48%</td>
<td>90.70%</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Giving advice on maternity benefits</td>
<td>64%</td>
<td>55.50%</td>
<td>&lt; 0.13</td>
</tr>
<tr>
<td>Checking growth of baby</td>
<td>90%</td>
<td>82.40%</td>
<td>&lt; 0.08</td>
</tr>
<tr>
<td><strong>Midwife not qualified to perform these tasks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caesarean delivery</td>
<td>79%</td>
<td>79.60%</td>
<td>&lt; 0.88</td>
</tr>
<tr>
<td>Forceps delivery</td>
<td>42%</td>
<td>62.00%</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Ventouse delivery</td>
<td>42%</td>
<td>63.80%</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Breech delivery</td>
<td>30%</td>
<td>57.40%</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

In summary, comparison with the study by Leach et al (1998), the pregnant women in this study were better informed about what a midwife is qualified or
not qualified to do. That is, a midwife is qualified to perform a normal vaginal
delivery, give information and advice about pregnancy and childbirth and
postnatal care of mother and baby (Section 2.2).

The participants in this study were more likely to believe that a midwife is not
qualified to perform caesarean, breech, forceps and ventouse deliveries.
These are ‘deviations’ from normal deliveries. A midwife is not qualified to
perform complicated, operative or instrumental deliveries. However, a midwife
is trained to detect deviations from normal pregnancy and labour and should
appropriately refer and seek obstetric assistance from the obstetric team
(ACMI, 1989).

The results from this study are more likely to represent and reflect the
perceptions of first time pregnant (primigravida) participants and therefore
pregnant women who have not previously utilized the services of a midwife or
maternity services. The differences in sample composition of primigravida
and multigravida in the study by Leach et al (1998) does not allow for the
results to be accurately compared with the findings from this study. As stated
in Section 5.5, the sample in this study was limited to primigravida to exclude
external influences and factors that may affect women’s perceptions of the
midwife’s role. The study by Luanaigh (1995) recruited a sample of
primigravida (section 3.3). A comparison of the study by Luanaigh (1995) will
be discussed in the following section.
7.2.5.2. Comparing results with the study by Luanaigh (1995)

The study by Luanaigh (1995) was conducted to explore women's experiences and knowledge regarding midwifery services. This study investigated pregnant women's perceptions of the role of a midwife regarding the role of a midwife. The results from this study compared favourably with the study by Luanaigh (1995) in terms of pregnant women's perceptions of the role of a midwife.

In the study by Luanaigh (1995), eighty two percent (82%) of the participants identified the midwife as the main health professional to deliver a baby compared to eighty eight percent (88%) of the first time pregnant women in this study, who stated that a midwife is qualified to deliver a baby normally, ($X^2 = 1.24, \ p < 0.03$). There were no significant differences between the two percentages, indicating that pregnant women in these two studies have similar perceptions of the role of a midwife in relation to delivering babies.

<table>
<thead>
<tr>
<th></th>
<th>Luanaigh (1995)</th>
<th>This study (2001)</th>
<th>$X^2$ test</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>Primigravidas</td>
<td>Primigravidas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td>54</td>
<td>108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwife deliver baby</td>
<td>82%</td>
<td>88%</td>
<td>$&lt; 0.03$</td>
<td></td>
</tr>
</tbody>
</table>

Table 22 Comparison of results between Luanaigh (1995) and this study (2001)

In addition, Luanaigh (1995) reported that ninety two percent (92%) of the participants believed that midwives provide total care throughout pregnancy. The specifics of the care were not given. This study provided 'specific details' of the care provided by a midwife (refer to table 21).
In terms of whether a midwife is qualified to perform instrumental, complicated or operative deliveries, this was not conducted in the study by Luanaigh (1995) and therefore this did not allow for comparison between the two studies pertaining to these tasks.

This study is comparable to the study by Luanaigh (1995) in terms of the sample composition. The participants in these two studies consisted of a random sample of primigravidas. As previously mentioned, the rationale for selecting this specific sample group was to exclude external bias and knowledge, based on the assumption that this specific group of women would have limited knowledge of pregnancy and maternity services by virtue of their first pregnancies. Although the sample by Luanaigh (1995) was half the sample size of this study, the similar trends in the perceptions of the participants from these two studies in different countries clearly demonstrated that childbearing women in Australia and the United Kingdom shared similar perceptions of the role of a midwife.

The responses of the first time pregnant participants (primigravidas) from these two countries at either end of the globe were similar. The participants in both studies unanimously identified that midwives are specifically trained and qualified to deliver babies and provide maternity care and representative of primigravidas’ views on the role of a midwife. In comparison to the studies by Leach et al (1998), Luanaigh (1995) and this study, primigravidas were better able to identify the role of a midwife. These first time pregnant women
overwhelmingly believed that a midwife is qualified to deliver a baby. This had disproved the investigator’s suspicion that pregnant women here in Australia perceived the role of a midwife differently from their European counterparts. In summary, the differences in sample composition and size may not allow for the results of this study to be accurately compared with the study by Leach et al (1998). However, the participants in both studies believed overwhelmingly that a midwife is not qualified to perform caesarean deliveries, but a majority agreed that a midwife is qualified and trained to deliver a baby normally. The participants in this study were more likely to believe that a midwife is not qualified to perform breech and forceps delivery.

In comparison to the study by Leach et al (1998), the results of this study are more likely to represent and reflect the perception of first-time pregnant (primigravidas) participants and therefore pregnant women who have not utilized the services of a midwife or maternity services. Limitations of this study are acknowledged. In the following section, the limitations of the study are discussed.

7.3. Limitations of the study

The limitations of this study must be considered in the interpretation of the findings. Although the sample size was not large, the response rate to participate in the study was high (92.3%). These results are only reflective of a relatively small proportion of primigravidas. The findings from this study cannot be generalized beyond primigravidas booked at Westmead Hospital. They can be generalized if the participants are similar to the overall population.
of primigravidas in terms of age, ethnic nationalities, profession and educational background.

There were no comparisons made with the perceptions and views of the multigravidas, who may have a different perception of the role of a midwife. Multigravidas may present a different perception from the primigravidas due to previously using the maternity services and the care provided by a midwife. Another study would be required to show these perceptions in order to facilitate comparisons.

Socio-economic influences were not considered in this analysis. A replication of this study to explore the perceptions of a higher socio-economic group of pregnant women, for example in the affluent north Sydney area and another group of pregnant women in a lower socio-economic area would serve to highlight perceptions of the role of a midwife for differences and similarities to be measured.

7.4. Conclusion

In conclusion, this study identified the specific role of a midwife and revealed that a majority of first time pregnant women (primigravidas) identified that midwives were qualified to deliver babies normally and to provide intrapartum care for a pregnant woman in labour. The quantitative results were supported by the qualitative analysis of the data. Women believed that a midwife is qualified to provide a wide range of midwifery related services in the antenatal period, which included giving advice on pregnancy, maternity service and
benefits, childbirth, checking on growth and position of the baby, listening to baby, taking blood samples, checking urine and postnatal checking of the baby and mother.

This study identified the role of a midwife as a source of information, support, education, assistance, guidance, advice and knowledge. The findings have similarity to the findings by Lim, Ong and Sabapathy (1997). These are the ‘actual’ roles borne by the midwives at Westmead Hospital in their contacts with the maternity clients.

Comparison of results with the findings in the United Kingdom by Luanaigh (1995) and Leach et al (1998) demonstrated that childbearing women in these two countries have similar perceptions of the role of a midwife. There were significant differences between the findings from this study and the study by Leach et al (1998). The pregnant women in this study were better informed than the study by Leach et al (1998). The investigator’s suspicion that the childbearing women in Australia perceived the role of a midwife differently from their European counterparts was not supported by the findings from this study. The investigator concurred and concluded that childbearing women in Australia do not perceive the role of a midwife differently from their European counterpart and based on the findings from this study, believed that the childbearing women at the opposite ends of the globe shared similar perceptions of the role of a midwife.

Ethnicity of the pregnant women did not influence this perception of the role of a midwife. Pregnant women unanimously have the same belief that a midwife
is qualified to provide maternity care in pregnancy, care in labour, deliver a baby normally and follow on to the postnatal care of mother and baby.

Age has a very minor influence contributing to a difference of opinion or perception. Women in the older age group were more likely than the younger women to believe that a midwife is trained to provide midwifery care and deliver a baby normally and not qualified to perform medical procedures, manipulative and caesarean deliveries. The findings from this study suggested that older pregnant women were more perceptive of the role of a midwife. Luanaigh (1995) mentioned in his study that younger women in the 16 to 19 years were more likely to be unemployed, have a ‘different expectations’ of a midwife and asked different questions from women who were older.

This study highlighted that the limitations of a midwife were attributed to the non medical training of a midwife. Indeed, a midwife works in collaboration with an obstetric medical officer. In the event of an obstetric or medical complication, the midwife is professionally responsible for referring these clients to an obstetric medical officer. A midwife is specifically trained and qualified to deliver babies normally, perform non medically related aspects of maternity care and to recognise deviations from the normal maternity event.

The findings from this study agreed with several studies which have identified a lack of knowledge and information regarding the role of a midwife. This limited information reduces the choices of a woman selecting the models or
types of maternity care in pregnancy. One of the most recent findings pertaining to this was by Zadoroznyi (2000), who explained that this lack of knowledge of the role of a midwife was due to the lack of information explaining what a midwife is capable of doing.

Information about the midwife should include qualifications of a midwife, what a midwife is specifically trained to do and the role of the midwife as part of the multidisciplinary health team. This could be achieved by providing information at ‘booking in’ for hospital confinement, pamphlets in GP and family clinics explaining the role and services provided by a midwife. One example is a booklet called ‘Emma’s Diary’ published by the Royal Australian College of General Practitioners and endorsed by the Australian College of Midwives Incorporated. This booklet includes information on the role of a midwife and general practitioner in relation to maternity care. Besides providing a weekly guide to the development of pregnancy, growth of the fetus, advice on exercises, diet and minor discomfort in pregnancy, This serves to highlight the services of a midwife especially to women who are pregnant for the first time and the collegial relationship between a midwife and doctor.

The midwife’s work remains largely unnoticed by women who were pregnant for the first time. Leach et al (1998) in the United Kingdom, and Ong, Lim, and Sabapathy (1997) from Singapore in Australia, had similar findings regarding the lack of information regarding the work of a midwife and the need to publicise the role of a midwife. The investigator affirmed that the community
should be provided with information regarding the role of a midwife and what a midwife is capable of providing in terms of maternity care.

Moreover, the question remained as to why pregnant women have a 'need' for a doctor to be present or called to attend to the delivery of the baby. This study has not answered this question. Further studies to investigate this are recommended.

Limitations of this study were acknowledged and discussed in Section 7.3. Recommendations for further studies following this study will be discussed in the next section (Section 7.5.).

7.5. Recommendations

There were no comparisons made with the perceptions and opinions of the multigravidas, who may have a different view of a midwife after utilizing maternity services and having contacts with a midwife. The investigator recommends that to accurately capture a pregnant woman's perception of the role of a midwife, this study should be extended to include multigravidas. Comparison of perceptions of primigravidas and multigravidas could be performed and this will present a more accurate assessment of the perceptions of pregnant women.

As previously mentioned in Section 7.3, the sample size should be increased to capture the perceptions of a wider population of pregnant women. By expanding the area of study, to include higher socio-economic and lower
socio-economic groups, differences of perceptions could be explored to
determine if socio-economic status influences the perception of the role of a
midwife.

As mentioned in Section 7.2.3., certain questions remain unanswered. Why
do pregnant women request for a doctor to be present at the delivery of the
baby when they have not asked for a doctor during their labour? What
changed their attitude during labour to the imminent delivery of their baby? A
study to investigate why these women changed their attitude during labour
and delivery of their baby is recommended.

In Section 7.2.4.4., it was acknowledged that there is a persistent lack of
information regarding the role of the midwife. A study is recommended to
investigate this issue and what sort of information would be beneficial to these
women. A sample of multigravidas and primigravidas is recommended, to
allow for comparisons. That is, do multigravidas seek similar information to
primigravidas or are their needs different? In order to rectify this persistent
lack of information regarding the role of the midwife, publications in the
professional and public press; and educating secondary school children
regarding the midwife’s role are avenues that could be explored.

In summary, this study investigated childbearing women’s perceptions of the
role of a midwife in Australia. A partial replication of the study by Leach et al
(1998) was conducted. Whereas Leach et al (1998) recruited primigravidas
and multigravidas, this study recruited primigravidas only with the main
purpose of excluding previous influences and factors that may affect these women's perceptions (Section 5.5).

Findings from this study revealed that pregnant women were knowledgeable and able to identify what a midwife is qualified or not qualified to do. This study in Australia will contribute to the information regarding childbearing women’s perceptions of the role of a midwife.

Finally, midwives are part of the wider community. They make valuable contributions to the community. Their expert midwifery care and service to pregnant women must be recognised by the community for the mutual benefit of the service providers and recipients.
## APPENDIX 1.

Checklist used to monitor antenatal advice given at each antenatal visit

<table>
<thead>
<tr>
<th>SIXTEEN WEEKS (16)</th>
<th>TWENTY WEEKS (20)</th>
<th>TWENTY FOUR WEEKS (24)</th>
<th>TWENTY EIGHT WEEKS (28)</th>
<th>THIRTY WEEKS (30)</th>
<th>THIRTY FOUR WEEKS (34)</th>
<th>THIRTY SIX WEEKS (36)</th>
<th>THIRTY SEVEN (37)</th>
<th>THIRTY EIGHT (38) WEEKS</th>
<th>THIRTY NINE (39)</th>
<th>FORTY WEEKS (40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check blood results &amp; pap smear</td>
<td>Check AFP &amp; US results</td>
<td>Advise re: SGTT next</td>
<td>SGTT</td>
<td>Child safety - SIDS - car seats</td>
<td>Delivery suite tour</td>
<td>Discuss birth options</td>
<td>Fears and anxieties</td>
<td>Early labour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFP Check US booking</td>
<td>Pelvic floor exercises</td>
<td>Previous pregnancies</td>
<td>Discuss filling in birth options</td>
<td>Raspberry leaf tea (optional)</td>
<td>Perineal massage</td>
<td>Contact numbers for TMP &amp; calling system</td>
<td>Unexpected outcomes</td>
<td>Labour expectations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits of early discharge</td>
<td>Breastfeeding/ preparation</td>
<td>Early discharge benefits</td>
<td>What to bring to hospital</td>
<td>Doctor next visit (32)</td>
<td>Check FBC &amp; antibodies</td>
<td>Signs of labour</td>
<td>Support people</td>
<td>Postmaturity options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TMP contact numbers</td>
<td>Partner involvement in pregnancy</td>
<td>Fetal movement awareness</td>
<td>FBC; group &amp; screen (for RH Neg)</td>
<td>Breast Check</td>
<td>Benefits of early discharge</td>
<td>1. Childcare 2. Care of siblings 3. Reactions</td>
<td>Vit K NBST Hepatitis B Immunisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes /reading</td>
<td>Sexuality in pregnancy</td>
<td>Pain relief options</td>
<td>Rest</td>
<td>Eating and drinking in labour</td>
<td>Postnatal feelings PND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diet exercise Backcare</td>
<td></td>
<td>Positions for birth</td>
<td>Meet the midwives evening (TMP only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discomforts of pregnancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2. 'Midwives Data Collection' form

**NSW MIDWIVES DATA COLLECTION**

<table>
<thead>
<tr>
<th>Mother Unit Record No.</th>
<th>Hospital Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name</td>
<td>Family Name</td>
</tr>
<tr>
<td>Address</td>
<td>Postcode</td>
</tr>
</tbody>
</table>

**Mother's Birth date**

- Day: [ ]
- Month: [ ]
- Year: [ ]

**Country of birth**

- Australia [ ]
- Other [ ]

**Indigenous status:**

- Aboriginal [ ]
- Torres Strait Islander [ ]
- Aboriginal and Torres Strait Islander [ ]
- None of the above [ ]

**Previous pregnancy greater than 20 weeks?**

- Yes [ ]
- No [ ]

**If yes, specify number of previous pregnancies greater than 20 weeks?**

**Was the last birth by caesarean section?**

- Yes [ ]
- No [ ]

**Total number of previous caesarean sections?**

**Date of LMP**

- Day: [ ]
- Month: [ ]
- Year: [ ]

**Prenatal diagnosis 20 weeks gestation?**

- CVS [ ]
- Amniocentesis [ ]

**Antenatal care**

- Duration of pregnancy at first visit (weeks): [ ]
- Not booked [ ]

**Medical conditions**

- Diabetes mellitus [ ]
- Gestational diabetes [ ]
- Chronic hypertension [ ]
- Pre-eclampsia [ ]

**Smoking**

- Did the mother smoke at all during pregnancy? [ ]
- No [ ]
- Yes [ ]

- If yes, how many cigarettes each day on average in the second half of pregnancy? [ ]
- > 10 per day [ ]
- < 10 per day [ ]
- Unknown [ ]

**Gestational age at onset of labour**

- Spontaneous [ ]
- Induced [ ]
- No labour [ ]

**If labour augmented/induced (check 1 or more):**

- Oxytocin [ ]
- prostaglandins [ ]

**Pain relief/anaesthesia**

- (pick 1 or more)
- None [ ]
- Epidural [ ]
- Spinal [ ]
- General anaesthetic [ ]
- other [ ]

**Presentation at birth**

- Vertex [ ]
- breech [ ]
- other [ ]

**Type of delivery**

- Normal vaginal [ ]
- Forceps [ ]
- vacuum extractor [ ]
- Caesarean section [ ]

**If caesarean section, mark indication:**

- Cx dilation unknown [ ]
- Cx 3cm dilated or less [ ]
- Cx dilated more than 3 cm [ ]

**Fetal distress**

- Other [ ]

**Perineal status**

- Intact [ ]
- 1st deg. tears/graze [ ]
- 2nd deg. tears [ ]
- 3rd deg. tears [ ]
- Other [ ]

**Surgical repair of the vagina or perineum?**

- Yes [ ]
- No [ ]

**Father’s status**

**Mother’s status**

**Discharge**

- Baby’s date of discharge [ ]
- Day: [ ]
- Month: [ ]
- Year: [ ]

**Hospital transferred to**

- Baby died [ ]
- Date of death [ ]
- Day: [ ]
- Month: [ ]
- Year: [ ]

**Signature of midwife at discharge**

--

Health Department Copy

Please complete and forward to: NSW Midwives Data Collection

Patient Data Management Unit, Level 6
Locked Bag 901, North Sydney, NSW 2091

206
APPENDIX 3. Prompt card

PROMPT CARD

Before birth:

Giving antenatal advice on:
Pregnancy = 1
maternity services = 2
maternity benefits = 3
childbirth = 4

Checking growth of baby = 5
Listening to baby = 6
Taking blood samples = 7
Checking blood pressure = 8
Checking position of baby = 9
Prescribing medicines = 10
Checking urine = 11

At Birth:

Breech delivery = 1
Give epidural/anaesthetic = 2
Normal delivery = 3
Care in labour = 4
Forceps delivery = 5
Ventouse delivery (suction delivery) = 6
Suturing (stitching) = 7
Caesarean delivery = 8

After Birth:

Postnatal checking of baby and mother = 1
APPENDIX 4. Semi structured questionnaire

SEMI STRUCTURED QUESTIONNAIRE

INTERVIEW QUESTIONS
Perceptions of Staff

I would like to find out how much women know about the work of staff who provide maternity care. To help me to find out more, I will ask questions and at times show you a card which contain lists for you to read before pointing out your choices. There are no right or wrong answers to these questions and so feel able to give your own views which will help me to find out the information I need.

1. Could you please describe for me, in general, what a midwife does in relation to helping you with your maternity care?

2. Do you know of any specific thing or things she or he is trained to do to help you with your pregnancy and childbirth? I will show you a list and if you think anything on this is applicable, please indicate the item or items.

SHOW PROMPT CARD
(Call out items to ensure recorded/noted)

3. Is there anything that you ‘believe’ she / he is not qualified to do for you?
I will show you the card again.....
APPENDIX 5. Demographic details

Demographic Details
I am asking questions that will help in the analysis of all the information collected and ensure that a mixed sample of women are interviewed. To do this, I need to know some details about yourself.

Your accommodation

4. Do you own or rent your home? (If rented, is it housing commission or private?)
   1 own
   2 rented private
   3 rented housing commission

Your age

5. What is your date of birth?
   Dd / mm / yy

6. Do you have access to telephone?
   0 No
   1 Yes

7. What is your job/occupation?

8. Full or part time?
   0 unemployed
   1 part
   2 full

9. Have you worked since leaving school?
   0 No
   1 Yes

10. What age were you when you left school or full-time education?

11. Are you single, married, living with a partner, divorced or widowed?
   0 single
   1 married
   2 living with a partner
   3 divorced
   4 widowed

12. Country of birth

13. Length of time in Australia

That completes all of the question. Thank you very much for all your help.

Is there anything that you would like to ask about the research project?
APPENDIX 6. ‘Selection Criteria Checklist & Registration’ form

SELECTION CRITERIA CHECKLIST & REGISTRATION FORM

Exploring the childbearing women’s perception of the role of a midwife

Patient’s name: ____________________________ Date of Registration ____________

Tick Appropriately

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you explained the study to the participant?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is the participant aged 17 years and over?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is the participant a primigravida?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Is this a ‘booking in’ visit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Has the participant completed the consent form?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*If you have ticked All ‘YES’ above, the participant is eligible to enter the study. Please complete the next part of the form only if the patient is ELIGIBLE.*

<table>
<thead>
<tr>
<th></th>
<th>Date of birth</th>
<th>First language</th>
<th>Country of birth</th>
<th>Interpreter required?</th>
<th>Private patient?</th>
<th>Clinic patient?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>date/month/year</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

210
APPENDIX 7. ‘Consent to participate in research’ form

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research Project: Exploring Childbearing Women’s Perceptions Of The Role Of A Midwife

Investigators: Miss Leen Ooi (Catherine) Boon

1. I understand that the investigator will conduct this study in a manner conforming with ethical and scientific principles set out by the National Health and Medical Research Council of Australia and the Good Clinical Research Practise Guidelines of the Therapeutic Goods Administration.

2. The general purposes, methods and demands and the possible risks, inconvenience which may occur to me during the study have been read and explained to me by , and I, being of over the age of 14 years but under the age of 16 years (delete as applicable), acknowledge that I understand the methods and demands relating to the treatment and the possible risks, inconveniences and discomforts which may occur.

3. I acknowledge that I have been given time to consider the information and to seek other advice.

4. Refusal to take part in this study will not affect the usual treatment of my condition.

5. I am volunteering to take part in this study and I may withdraw at any time.

6. This research has been approved by the Western Sydney Area Health Service Human Research Ethics Committee.

7. I acknowledge that I have received a copy of this form and the participant information sheet, which I have signed.

8. Sponsoring pharmaceutical companies and any regulatory authorities may have access to my medical records to monitor the research in which I am agreeing to participate. However, my identity will not be disclosed to them or anyone else.

Name of participant ____________________________
Address: ________________________________

Signature of participant (refer below for definition) ____________________________
Signature of investigator ____________________________
Signature of Interpreter ____________________________

Definition of Participant
This may only be signed by:
1. Participants over 16 years of age; or
2. Participants between the age of 14 and 16 years together with the signature of their parent or guardian.
3. Parent or guardian of participants under 14 years.
4. Where patient or participant has a medical or legal disability then signature must be that of:
   a) legal guardian; or
   b) Spouse or de facto spouse; or
   c) Caregiver [refer (e)]; or
   d) The Guardianship Board (Telephone 02 9555 8500)
   e) Family member or friend but not a professional caregiver (e.g. medical superintendent, director of nursing, nursing home director).
APPENDIX 8.  ‘Patient’s information’ form

PATIENT INFORMATION

Title of Project:
Exploring childbearing women's perceptions of the role of a midwife

Name(s) of investigator(s):
Miss Leen Ooi (Catherine) BOON
Clinical Nurse Specialist (Midwife)
Delivery Suite, Westmead Hospital.
Telephone no. (Wk) 9845 7395

What is the purpose of the study?
• To explore the childbearing women’s perceptions of the midwifery role in Australia
• To see if these perceptions are different from the United Kingdom’s study

Who will be asked to enter the study?
First time mothers aged 17 years and over

What will happen during the study
• While you are waiting to be ‘booked in’ by a midwife in Clinic H or waiting for an ultrasound scan, you will be asked to complete a questionnaire, which will only take 5 to 10 minutes.
• The researcher will help you to complete the questionnaire.
• The completed questionnaire will be stored without your name and will be used for future statistical analysis. The information you provide will remain strictly confidential.

Patient’s Name:  
Signature:  
Date:  

Are there any risks?:
There are no identifiable risks involved in this study

Do you have a choice?:

212
Your participation in this study is voluntary. Refusal to take part in this study will not affect your care in this hospital.

If you have any problems with this survey, please contact the researcher: **Miss Leen Ooi Boon (Catherine)** on 9845 7395 or **Ms Shirley Bryce**, Research Office on 9845 8183 during working hours.

Participant's signature: ___________________ Signature: ___________________
Date: ____________________________________
Dear Leen,

Thank you for your two telephone contacts on 16 and 29 October 1998. I apologise for not contacting you sooner.

I am delighted to hear you are interested in replicating our study which was commissioned by The Northern Yorkshire Regional Health Authority. As I am sure you can appreciate Theresa and I are not the only authors and there were in fact eight researchers on this project. I have contacted The University of Leeds, which is where the copyright for the document sits and I have informed them of your interest and they too are delighted. At this moment in time I am planning to send you the full report with Appendices, however, I am unable to do this until I have full consent from The University of Leeds, The Northern Yorkshire Regional Health Authority and the eight researchers.

I appreciate you are probably quite eager to get started and I promise that as soon as I have the consent I will forward the documents. In the meantime if you wish to contact me on any quite specific issues I would be more than happy to talk to you over the telephone. I look forward to contacting you very shortly.

Yours sincerely,

Joanne Leach

Service Manager, Gynaecology and Postnatal Wards/
Research & Development Midwife
REFERENCES


Byrne, J. (2002). History in the making: the commencement of the 3-Year Bachelor of Midwifery in Australia. *Australian College of Midwives Incorporated, 2*(2), 6-7.


Statistical package for the social sciences (SPSS) for windows, version 10.3. SPSS Incorporated: Chicago.


Westmead Hospital and Community Health Service. (1996). Report to our community.


GLOSSARY

Accoucher. Person who delivers the baby

Antenatal. Pregnancy period before birth of the baby

Antepartum. Period prior to parturition of the baby, placenta and membranes

Gestation. Pregnancy

Intrapartum. The time a pregnant woman commences labour but prior to the birth of baby, placenta and membranes

Multigravida. A woman who has been pregnant more than once

Neonatal. A newborn baby

Primigravida. A woman who is pregnant for the first time

Postpartum. Period after the delivery of a baby, placenta and membranes