Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
INDUCTION OF LABOUR: THE INFLUENCES ON DECISION MAKING

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Midwifery

At Massey University
Palmerston North
New Zealand.

Diana Maree Austin
2004
Abstract

This thesis presents a study using a general qualitative approach that explores the reasons for induction of labour (IOL) for nulliparous women and the influences for women and Lead Maternity Carers (LMCs) on coming to that decision at a secondary care maternity facility in Auckland. It is part of a larger study that compares the outcomes for women who have had their labour induced and those whose labour began spontaneously.

Seventy-nine women and 74 of the LMCs who cared for these women were interviewed prior to induction in the period December 2002 to April 2003. The sample was obtained through the induction booking system used at the maternity facility.

Age, ethnicity, LMC type and data relating to the reasons for induction, information received, associated interventions and other methods used to induce labour in the community were collected. The qualitative data from the interviews was analysed using Boyatzis' method of thematic analysis and code development. Results showed that the main reason for induction was post-dates, however secondary influences were identified. The hospital booking system was a cause of inductions being commenced earlier than necessary. It appeared women had minimal information about the risks of induction and were not active participants in the decision making process. Communication between the health professionals, women and maternity facility was sometimes poor and led to the indication for induction being unclear. LMCs displayed a balancing of risk as they were conscious of the current research, previous experiences in relation to induction, expectations of peers, litigation and the concerns of women. Women were focused primarily on the safety of their baby. Induction of labour was viewed by women as having both a positive and negative effect on the birth experience.

Information sharing, stereotypes held by practitioners, fear of litigation and the type of relationship the LMC and women worked within appeared to influence the decision making to induce labour. A decision making tool that facilitates communication between all parties and outlines the risks and benefits of induction for women and their babies is one recommendation from the study. Research indicates that if such a tool is held by the woman it can promote informed choice in decision making.
Acknowledgements

As with most theses this project has been a major undertaking that at times has felt endless. It has been a family effort and to them I am very grateful. There have been many friends and family who have been supportive in achieving this goal and I ask them to please accept my thanks, some deserve a special mention.

To Luke for never giving up on my dream, for making endless cups of coffee and entertaining our girls.

To my daughters, Anita and Rochelle who I hope I have inspired to pursue knowledge.

To my mother Rosalie who has been so practical, thoughtful and caring in her support.

To the women, midwives and obstetricians who participated in the study, thank you for sharing your knowledge, views and experience. Thank you to the staff at the hospital who have supported me in the study.

To my supervisor Cheryl Benn who has given her expert guidance.

And finally to the Health Research Council for the award of a Summer Studentship.
Table of Contents

Abstract .........................................................................................................................i
Acknowledgements .........................................................................................................ii
List of Figures ..................................................................................................................vii
List of Tables ...................................................................................................................viii

Chapter 1: Orientation to the Study .............................................................................1
  1.1 Introduction ..............................................................................................................1
  1.2 Background ............................................................................................................1
  1.3 Induction of Labour .................................................................................................2
  1.4 New Zealand Maternity System .............................................................................3
  1.5 Study Context and Current System .......................................................................5
  1.6 Research Question and Aims of the Study ............................................................5
  1.7 Researcher's Situation ............................................................................................7
  1.8 Structure of the Thesis ...........................................................................................7
  1.9 Summary ................................................................................................................9

Chapter 2: Literature Review .......................................................................................10
  2.1 Introduction ...........................................................................................................10
  2.2 Search Strategies ..................................................................................................10
  2.3 Initiation of Labour ...............................................................................................11
  2.4 Reasons for / Benefits of Induction of Labour .......................................................12
    2.4.1 Post-dates ........................................................................................................12
    2.4.2 Fetal Growth Compromise .............................................................................14
    2.4.3 Pre-eclampsia ..................................................................................................15
    2.4.4 Diabetes ..........................................................................................................15
    2.4.5 Suspected Fetal Macrosomia .........................................................................16
    2.4.6 Age ..................................................................................................................16
    2.4.7 Elective or Maternal Request .........................................................................17
    2.4.8 Pre-Labour Rupture of Membranes ...............................................................19
  2.5 Risks of Induction of Labour ................................................................................20
  2.6 Induction and Associated Interventions ...............................................................21
### Chapter 4: Results – Descriptive 59

- **4.1 Introduction** 59
- **4.2 Participants** 59
- **4.3 Demographics of Women** 60
  - 4.3.1 Age of Women 60
  - 4.3.2 Ethnicity of Women 61
  - 4.3.3 Lead Maternity Carer 61
- **4.4 Reasons for Induction** 63
  - 4.4.1 Post-Dates 65
- **4.5 Gestation** 67
  - 4.5.1 Method Used for Assessing Gestation 67
- **4.6 Information About Induction** 68
  - 4.6.1 Source of Information About Induction 68
  - 4.6.2 Women’s Understanding of Risks and Benefits 69
- **4.7. Associated Interventions** 71
  - 4.7.1 Epidural Preference 71
  - 4.7.2 Mode of Birth 73
  - 4.7.3 Birth Predictions 74
- **4.8 Other Methods Used to Induce Labour** 75
- **4.9 Summary** 77

### Chapter 5: Results-Thematic Analysis / Code Development 78

- **5.1 Introduction** 78
- **5.2 Code Development** 78
  - Code 83
  - 5.2.1 Who Makes the Decision About Induction? 83
  - 5.2.2 Informing Women 87
  - 5.2.3 Booking System 91
  - 5.2.4 Reasons for Induction 92
5.2.5 Impressions of/Attitudes to Induction ................................................. 93
5.3 Summary ........................................................................................................ 95

Chapter 6: Discussion ......................................................................................... 97

6.1 Introduction ....................................................................................................... 97
6.2 Research Questions and Aims .......................................................................... 97
6.3 Reasons for Induction ....................................................................................... 99
   6.3.1 Post-Dates ................................................................................................... 99
   6.3.2 Large Baby .................................................................................................. 101
   6.3.3 Suspected Growth Restriction .................................................................. 102
   6.3.4 Maternal Age .............................................................................................. 102
   6.3.5 Maternal Request ....................................................................................... 102
6.4 Influences on Decision Making ...................................................................... 104
   6.4.1 The Women ................................................................................................. 104
   6.4.2 The Health Professionals .......................................................................... 107
   6.4.3 Organisational systems ............................................................................. 115
6.5 Methods Used to Induce Labour in the Community .................................... 121
6.6 Summary .......................................................................................................... 122

Chapter 7: Conclusions and Recommendations ............................................. 123

7.1 Introduction ....................................................................................................... 123
7.2 Limitations of the Study .................................................................................. 123
7.3 Conclusions ....................................................................................................... 124
7.4 Recommendations for Practice ...................................................................... 126
7.5 Recommendations for Education .................................................................. 127
7.6 Recommendations for Future Research ....................................................... 129
7.7 Summary .......................................................................................................... 129

Postscript ............................................................................................................... 131
Appendix A ........................................................................................................... 132
Appendix B ........................................................................................................... 136
Appendix C ........................................................................................................... 140
List of Figures

Figure 1 Mode of birth according to spontaneous (n=131) or induced (n=58) onset of labour for nulliparous women during October and November 2001. .........................2
Figure 2 Age distribution of women who participated in the study (n=79) .......................60
Figure 3 Days after due date for women whose LMC stated the reason for induction of labour was post-dates ..................................................................................66
Figure 4 Preference for use of epidural in labour on a scale of 1-10 ....................................72
Figure 5 Preference for epidural prior to induction for women who had no epidural in labour (n=24) ..................................................................................72
Figure 6 Mode of birth for women having an induction compared with spontaneous labour ........................................................................................................74
Figure 7 Mode of birth for women predicted to have a caesarean section (n=21) ..........75
Figure 8 Mode of birth for women predicted to have a vaginal birth (n=31) ..................75
Figure 9 Methods for induction used prior to admission for formal induction ................76
List of Tables

Table 1 Rate of caesarean section for nulliparous women in studies from the literature 23
Table 2 Age of women ........................................................................................................... 60
Table 3 Ethnicity of women whose labour was induced in the study and women whose
   labour began spontaneously during the study time frame ............................................. 61
Table 4 Type of Lead Maternity Carer ............................................................................. 62
Table 5 Main reasons for induction ................................................................................... 63
Table 6 Second reason that contributed to decision to induce labour ............................ 65
Table 7 Preferred time after due date for post-dates induction as stated by Lead
   Maternity Carer .............................................................................................................. 67
Table 8 Dating method used for post-dates ................................................................. 68
Table 9 Gestation of dating ultrasound (n=39) ............................................................ 68
Table 10 Source of information for women prior to induction of labour ...................... 69
Table 11 Positive effects of being induced (from women) ............................................. 70
Table 12 Negative effects of being induced (from women) ............................................ 71
Table 13 Mode of birth ..................................................................................................... 73
Table 14 Themes identified in the subsamples ................................................................. 81
Table 15 Code with themes ............................................................................................... 83