## Quality of care in maternal health: Childbirth practices of public and private skilled birth attendants and a quality improvement system in Cambodia

**Ponndara Ith** 

A thesis submitted in fulfilment of the requirements for the Degree of

**Doctor of Philosophy** 

**Faculty of Health** 

The University of Technology, Sydney, Australia

March 2013

#### **CERTIFICATE OF ORIGINAL AUTHORSHIP**

I hereby certify that the work in this thesis has not previously been published or written by another person, nor does it contain substantial proportions of material which have been accepted for the award of any other degree at UTS or any other educational institution, except where due acknowledgment is made in the thesis. Any contribution made to the research by others, with whom I have worked at UTS or elsewhere, is fully acknowledged within the text.

I also declare that the intellectual content of this thesis is the product of my own work. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. Furthermore, I certify that all information sources and literature employed are indicated in the thesis.

Signature of student:

Date:

#### Dedication

I dedicate this thesis to my late father Mr Ith Ponn and mother Chhim Kimly who both were killed during the Khmer Rouge period. My special dedication also goes to my late grandmother Yim Puy who spent most of her time, commitment and best efforts raising all my brothers and myself after we lost our beloved parents. Yim Puy often shared her stories, experiences, difficulties and challenges with us and offered us valuable ideas and thoughts about what was going on in the world and how, though we were orphans, we could, through hard work, mature into valuable adults able to contribute to it. She also motivated me and made all things possible for me to become a medical doctor in Cambodia.

My dedication also goes to all the women of Cambodia.



Image 1: A woman after birth with her mother



Image 2: Health Centre in Cambodia



Image 3: Primary and secondary midwives with Ponndara ITH (the researcher)

#### Acknowledgements

Many people have contributed to this thesis. All of them need special acknowledgement and appreciation. First of all, I would like to thank my supervisors, Dr Angela Dawson and Professor Caroline S.E. Homer. Angela and Caroline have read thousands words not only of the thesis presented here, but also of countless drafts of papers that have been submitted and accepted in peer-reviewed journals during my PhD journey. I greatly appreciate their extraordinary support, comments, guidance, encouragement and motivation, and for ensuring that I could submit this thesis on time. I also thank my alternative supervisors, A/Professor Rajanishwar Gyaneshwar, Clinical Director, Obstetrics and Gynaecology, Liverpool Hospital, Australia and Professor Saphann Vonthanak, Rector of Faculty of Health Sciences of Cambodia, who have offered frequent support, along with belief in the value of the work.

I am also grateful to my former supervisor, Associate Professor Anna Whelan for her continuous support for the project, from initial advice and contacts in the early stages through ongoing advice and encouragement to this day. Anna not only volunteered to be my referee for the application for the Australian Leadership Award (ALA) Scholarship 2009, but also through her vision and leadership assisted the development of my research proposal for PhD study. As well as my initial supervisor, Anna has been my inspiration in this work. Though she could not supervise me all the way through, her determination to improve care for all Cambodian women, and her friendship, support and vision are important components of this thesis

I would also like to thank postgraduate research coordinators Kate Crosbie and Catherine Webster at the University of New South Wales (UNSW) and Priya Nair and her colleagues at the University of Technology, Sydney (UTS) for their wonderful support during my candidature. Priya provided a valuable assistance in the formatting of this thesis. A special thank-you goes to my fellow Australian and international students with whom I journeyed on this PhD program at UNSW: Keith Masnick, Tuan Anh, Joao, Asela, Polydor Mutombo, Paula, Sowbhagya, Fahana, Rachael and at UTS: Kefalotse, Nancy, Kim, Jo, Haidee, Caleb, Dessie, Lina, Evan, Shakhuntola, Penny, Annette, Vijay and Calida. We always shared our stories, our worries and laughter during lunchtime, afternoon tea or research student forums. I am grateful for the friendship and conversation of these postgraduate colleagues, without whom I would have been unable to complete my project.

Husna Razee and Tuan Anh rescued me when I was struggling with NVivo software for analysing my qualitative data. They both have given wonderful support and friendship throughout the process and have helped develop my coding scheme on more than one occasion. Professor John Hall, former Director of Human Resources for Health Knowledge Hub, the University of New South Wales, Sydney, and the present Director, Professor Richard Taylor, offered their support and interest, and provided me with some funds through the Australian Agency for International Development (AusAID) for both rounds of my fieldwork in Cambodia. I am also appreciative of the support and encouragement provided by the Faculty of Health at the University of Technology, Sydney. The Health Services and Practice Research Degree Development, Faculty of Health, UTS, Sydney, also provided me with funds so I could present my work at the International Confederation of Midwives conference in Hanoi, Vietnam. I would like to acknowledge AusAID that awarded me the scholarship to undertake PhD study in Australia.

Dr Pich Horn, Director of the Provincial Health Department, Dr Tim Kosol, Dr Morgn Than, Dr You Sile, Directors of the Provincial and District Hospital in one province in Cambodia provided continuous support and assistance in accessing health facilities. Sincere thanks also go to all midwives, doctors and nurses with midwifery skills at hospitals and health centres, and other participants who volunteered for the study. Their willingness to volunteer for the study, their perseverance in carrying it out and their generosity in sharing their great experiences and views should not be underestimated. Without their active participation and commitment, this thesis would never have become reality.

I would also like to thank my editor, Christopher Henning, for his suggestions regarding my dissertation.

My appreciation of my family's capacity to indulge my dreams is unbounded. My aunt and parents-in-law instilled in me a love of learning and an awareness of social justice. My brothers and sisters have always given unquestioning and insightful support. My children Sokrich, Socheaka and Nicole have had to surrender considerable family time so that I could pursue my work. All of them, particularly my youngest daughter Nicole, did so without complaint, and gave me the strength to continue. Someone else has made everything worthwhile. My cherished wife Maleny provides me with the air I breathe. She selflessly put up with more for my challenge than should be humanly required. Although she went through a difficult time – including abdominal surgery while she was one month pregnant during my absence for fieldwork in Cambodia – she always gave me the freedom to pursue this endeavour, and the space, courage, love and support which made it possible. As well as my children and my wife, my parents-in-law, Ly Dong and Svay Sisarouth, my aunt Buoy Sokhon, my brothers, sisters, nephews and nieces, have all been a constant source of love and support throughout my project.

Last but not the least, my greatest debt of gratitude is to all the childbearing women who volunteered to participate in the study. Their enthusiasm for sharing their perspectives and experiences of maternity care in interviews, and their willingness to let me observe their births attended by skilled birth attendants at a time of great stress and risk are highly appreciated. I hope that the findings of this research can help improve the quality of maternity care and services for women who give birth across Cambodia.

# Peer reviewed publications and conference presentations from this research

A number of peer-reviewed publications and conference presentations have arisen from this PhD work. I have been the first author, or co-author on these papers and a reviewer of a paper in relation to Cambodia.

#### Peer reviewed publications:

Ith, P., Dawson, A. & Homer, C. 2012, 'Quality of maternity care practices of skilled birth attendants in Cambodia', *International Journal of Evidence-Based Healthcare*, vol. 10, no. 1, pp. 60-7.

Ith, P., Dawson, A., Homer, SE. C., Whelan, A. 2012, 'Practices of skilled birth attendants during labour, birth and the immediate post-partum period in Cambodia', *Midwifery*. In Press (Available at: <u>http://dx.doi.org/10.1016/j.midw.2012.01.010</u>)

Ith, P., Dawson, A. & Homer, C.S.E. 2012, 'Challenges to Reaching MDG 5: A Qualitative Analysis of the Working Environment of Skilled Birth Attendants in Cambodia', *International Journal of Childbirth*, vol. 2, no. 3, pp. 153-62.

Ith, P., Dawson, A. & Homer, C.S.E. 2013, 'Women's perspective of maternity care in Cambodia', *Women and Birth*, vol. 26, no. 1, pp. 71-5.

#### **Other publications**

Dr Angela Dawson, Tara Howes, Dr Ponndara Ith, Dr Natalie Gray, Dr Elissa Kennedy. Discussion Paper: Human resources for health in maternal, neonatal and reproductive health at community level: a profile of human resources for health in ten countries in the Asia and Pacific Regions.

Dr Angela Dawson, Tara Howes, Dr Ponndara Ith, Dr Natalie Gray, Dr Elissa Kennedy. Discussion Paper: Human resources for health in maternal, neonatal and reproductive health at community level: a synthesis of the literature with a focus on the Asia and Pacific Regions.

#### Paper reviewed

Asante, A, Hall, J and Roberts, G 2011, A review of health leadership and management capacity in Cambodia, *Human Resources for Health Knowledge Hub*, University of New South Wales, Sydney.

#### **Conference presentations**

Ith, P. Maternal Health in Cambodia. *Human Resources for Health*, University of New South Wales, Sydney, September 2009.

Ith, P. Quality Improvement of Maternal and Newborn Health: Workforce
Considerations in Cambodia. The 8<sup>th</sup> Annual Postgraduate Research Student Conference
2010, SPHCM, University of New South Wales, Sydney, 22 October

Ith, P. Writing the discussion in an article. Research Student Forum 2011, University of Technology, Sydney, 8-9 December.

Ith, P. International Experience Study. WHO-UTS Redesignation 2012, UTS, 15 June 2012.

Ith, P., Dawson, A., Homer, C.S.E. & Whelan, A.K. 2012, 'Practices of skilled birth attendants during labour, birth and the immediate post-partum period in Cambodia', *Midwifery*, vol. in press. The ICM Asia Pacific Regional Conference 2012, Hanoi, Vietnam, July 25-27, 2012.

Ith, P., Guest, 'Toward Universal Access to Skilled Birth Attendants: Sharing Experiences and Lessons', ASEAN International Symposium and Technical Exchange Program on Skilled Birth Attendance 2009, Phnom Penh, Cambodia 30 November-4 December, 2009.

Dedication	iii
Acknowledgements	v
Peer reviewed publications and conference presentations from this research	viii
Table of Contents	X
List of Tables	xvii
List of Figures	xviii
List of Abbreviations	xix
Abstract	xxi
Chapter 1 Introduction	1
1.1 Introduction	1
1.2 Background	4
1.2.1 Global maternal health situation	4
1.2.2 Historical context of the global movement to improve maternal health	7
1.2.2.1 The Safe Motherhood Initiative	7
1.2.2.2 Millennium Development Goals (MDGs)	10
1.2.3 The need for a qualified and competent health workforce	11
1.3 The context for the study: Cambodia	12
1.3.1 Geography and demography of Cambodia	12
1.3.2 Overview of recent history and politics	14
1.3.3 Maternal health situation in Cambodia	15
1.3.4 The health care system in Cambodia	18
1.3.5 Health sector reform in Cambodia	18
1.3.5.1 The implementation of user fees at MPA and CPA in Cambodia	21
1.3.6 Maternal health policy and planning	21
1.3.7 Maternal health workforce in Cambodia	22
1.3.8 Midwifery education and training	25
1.4 How I came to undertake this study	26
1.5 Structure of the thesis	29
1.6 Summary	30
Chapter 2 Literature Review	
2.1 Introduction	31
2.2 Approach to the literature search	31
2.3 Evidence for the need for SBAs	32
2.3.1 Historical overview of maternal mortality reduction	32
2.3.2 Skilled attendants can provide evidence-based cost-effective interventions	33

#### **Table of Contents**

2.3.3 Midwives are a preferred cadre of SBA	35
2.3.4 Teamwork is crucial	35
2.3.4.1 Traditional birth attendants and maternal health	36
2.3.4.2 Private health providers	37
2.4 Skills and competencies of SBAs	40
2.5 SBAs and evidence-based interventions	42
2.6 A supportive and enabling environment for SBAs	43
2.7 The quality of maternity care from the perspective of women	45
2.8 The way forward for improving maternal health	48
2.8.1 The concepts of competence and competency	48
2.8.2 Models of quality care	50
2.8.3 Quality of maternity care	53
2.8.4 The quality improvement process	56
2.9 Summary	58
Chapter 3 Methods	59
3.1 Introduction	59
3.2 Study design	59
3.2.1 Theoretical and methodological approach	59
3.2.2 The Study location and research sites	68
3.2.2.1 Choice of the province	68
3.2.2.2 Choice of the study site	68
3.3 Study participants	70
3.3.1 Participant selection	70
3.3.1.1 Skilled birth attendants	71
3.3.1.2 Birthing women	71
3.3.1.3 Private skilled birth attendants	72
3.3.1.4 Key stakeholders	72
3.3.2 Participation compensation	72
3.4 Ethical considerations	73
3.5 Organising fieldwork	75
3.6 Data collection techniques	76
3.6.1 Non-participant observation	76
3.6.2 In-depth interviews	78
3.6.3 Focus group discussions	80
3.6.4 Field notes and informal interviews	80
3.7 Data management and analysis	82
3.8 Rigour of qualitative research	83

3.8.1 Credibility	84
3.8.2 Dependability	86
3.8.3 Confirmability	86
3.8.4 Transferability	87
3.9 Limitations of the study	87
3.9.1 Difficulties and challenges	87
3.9.2 Other limitations of the study	88
3.10 Summary	90
Chapter 4 Quality of maternity care practices of skilled birth attendants in C	Cambodia
(Publication 1)	92
4.1 Abstract	92
4.2 Introduction	93
4.3 Methods	97
4.4 Findings	99
4.4.1 Labour and birth practices	99
4.4.2 Post-partum practices	101
4.4.3 Newborn practices	101
4.5 Discussion	102
4.6 Conclusion	105
	105
Chapter 5 Practices of skilled birth attendants during labour, birth and the i	
	mmediate
Chapter 5 Practices of skilled birth attendants during labour, birth and the i	mmediate 107
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	<b>mmediate</b> <b>107</b> 107
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> ) 5.1 Abstract	<b>mmediate</b> <b>107</b> 107 108
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> ) 5.1 Abstract 5.2 Introduction	<b>mmediate</b> 107 107 108 111
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> ) 5.1 Abstract 5.2 Introduction 5.3 Methods	<b>mmediate</b> 107107108111113
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 108 111 113 114
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 108 111 113 114
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 108 111 113 114 114 115
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 108 111 113 114 114 115
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 108 111 113 114 114 115 115 116
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 107 108 111 113 114 114 115 115 116 117
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 107 108 111 113 114 114 115 115 116 117 119
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> ) 5.1 Abstract 5.2 Introduction 5.3 Methods 5.4 Findings 5.4.1 Skills in the care of labouring women 5.4.2 Provision of support in labour 5.4.3 Interventions in the second stage of labour 5.4.4 Cleanliness during birth 5.4.5 Management of the third stage of labour 5.4.6 Immediate care of the newborn infant and immediate postnatal care 5.4.7 Lack of policy and authority	mmediate 107 107 107 108 111 113 114 114 115 115 116 117 119 119
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 107 108 111 113 114 114 114 115 115 116 117 119 120
Chapter 5 Practices of skilled birth attendants during labour, birth and the i post-partum period in Cambodia ( <i>Publication 2</i> )	mmediate 107 107 107 107 107 107 113 113 114 114 115 115 116 117 119 120 120

(Publication 3)	
6.1 Abstract	
6.2 Introduction	
6.3 Methods	
6.4 Findings	
6.4.1 Physical working environment	
6.4.2 Incentives and remuneration	131
6.4.3 Workplace culture	
6.4.4 Management practice	
6.4.5 Professional development opportunities	
6.5 Discussion	
6.6 Conclusion	
Chapter 7 Observed and perceived practices of private skilled birth atte	ndants during
labour, birth and the immediate post-partum period and their working $\epsilon$	environments
(Unpublished paper)	141
7.1 Introduction	141
7.2 Methods	141
7.2.1 Data collection techniques	141
7.2.2 Data analysis	141
7.3 Findings	142
7.3.1 Observed births of private SBAs	142
7.3.1.1 Labour and birth practices	143
7.3.1.2 Post-partum practices	145
7.3.1.3 Newborn practices	145
7.3.2 The perceived practice of private SBAs	146
7.3.2.1 Labour and birth practices	147
7.3.2.1.1 Skills in the care of labouring women	147
7.3.2.1.2 Provision of support in labour	147
7.3.2.1.3 Interventions in the second stage of labour	148
7.3.2.1.4 Management of the third stage of labour	149
7.3.2.1.5 Aseptic procedure during birth	149
7.3.2.2 Post-partum practices	150
7.3.2.3 Newborn practices	
7.3.3 The perceived working environment of private SBAs	151
7.3.3.1 Physical working environment	151
7.3.3.2 Private-public skilled birth attendant partnership	152

Chapter 6 The working environments of public skilled birth attendants in Cambodia

7.3.3.3 Fees for services	153
7.4 Discussion	153
7.5 Summary	157
Chapter 8 Women's perspective of maternity care in Cambodia (Publication 4)	158
8.1 Abstract	158
8.2 Introduction	159
8.3 Methods	160
8.4 Findings	163
8.4.1 Seeking a safe birth	163
8.4.2 Staff attitudes	164
8.4.3 Support during labour and the immediate post-partum period	164
8.4.4 Perceptions of fees of birth	166
8.5 Discussion	166
8.6 Conclusion	168
Chapter 9 Implementing a quality improvement system in Cambodia	169
(Unpublished paper)	169
9.1 Introduction	169
9.2 Methods	169
9.2.1 Method of data collection	169
9.2.2 Data analysis	169
9.3 Findings	169
9.3.1 Facilitators to the development and implementation of quality improvement	170
9.3.1.1 The collaborative development of QI with key stakeholders	170
9.3.1.2 The alignment of QI with policies and guidelines	170
9.3.1.3 Monitoring and evaluation of QI implementation	171
9.3.2 Barriers to the development and implementation of QI process	172
9.3.2.1 Lack of a comprehensive QI tool	172
9.3.2.2 Ineffective leadership and management	172
9.3.2.2.1 QI team lacks power to ensure adequate funding for QI activities	172
9.3.2.2.2 Poor political commitment and weak coordination	173
9.3.2.2.3 Lack of health personnel to ensure effective implementation of QI	173
9.3.2.2.4 Poor supervision and support resulted in limited management capacity .	174
9.3.2.2.5 Financial pressure on health care providers to account for quality	
improvement	174
9.3.3 Ways forward suggested by key stakeholders	175
9.3.3.1 The need for a systems approach	175
9.3.3.2 The need for strong leadership and political commitments	176

9.3.3.3 The need for incentives packages and supportive working environments	176
9.4 Summary	176
Chapter 10 Discussion: an overview and discussion of the implications for maternity	care
	178
10.1 Introduction	178
10.2 Purpose of the study	178
10.3 Review of the research findings and discussion	178
10.3.1 Adequate numbers of competent and motivated SBAs	180
10.3.1.1 Skills and competencies of SBAs	180
10.3.1.2 Education and training of SBAs	182
10.3.1.3 The need for an adequate number of competent SBAs	182
10.3.2 The need for accountability for SBAs	183
10.3.2.1 Performance management system	184
10.3.2.1.1 Job description, criteria for promotion and professional development	184
10.3.2.1.2 Improved supervision and support	185
10.3.2.1.3 Improved living conditions and the work environment of SBAs	186
10.3.2.1.4 Adequate remuneration and incentives	188
10.3.2.2 Quality improvement process	189
10.3.3 Strong leadership and management	193
10.3.3.1 Health financing and mobilisation of resources	193
10.3.3.2 Adequate essential drugs, equipment and infrastructure	194
10.3.3.3 Policy and regulatory frameworks	194
10.3.3.4 Strengthening public-private partnerships	196
10.3.4 Community engagement	198
10.4 Contribution of the thesis	199
10.5 Implications for midwifery practice, policy and research in Cambodia	200
10.5.1 Implications for midwifery practice	201
10.5.2 Implications for policy	202
10.5.2.1 The need for accountability	203
10.5.2.1.1 Clear job descriptions and professional development opportunities	203
10.5.2.1.2 Adequate remuneration and incentives for SBAs	204
10.5.2.2 The need for strong leadership and management	205
10.5.2.2.1 Adequate essential drugs and infrastructure and their rational use	205
10.5.2.2.2 Professional leadership and partnerships	205
10.5.3 Implications for future research and development	207
10.6 Conclusion	207
References	210

Appendices	236
Appendix 1: Ethics Approval from the University of New South Wales	237
Appendix 2: Ethics Approval from National Ethics Committee for Health Research (N	ECHR)
	239
Appendix 3: Ethics Approval from the University of Technology, Sydney	240
Appendix 4: Letter of Site Authorisation from the Provincial Health Department	241
Appendix 5: Letter from the Provincial Health Department to Operational District Off	ices 242
Appendix 6: Letter of Site Authorisation from Private Maternity Home Clinics	243
Appendix 7a: Participant Information Statement and Consent Form for all Birth Attended	dants
(English version)	244
Appendix 7b: Participant Information Statement and Consent Form for all Birth Atten	dants
(Khmer version)	247
Appendix 8a: Participant Information Statement and Consent Form for Pregnant Wom	nen
(English version)	249
Appendix 8b: Participant Information Statement and Consent Form for Pregnant Wom	nen
(Khmer version)	251
Appendix 9a: Participant Information Statement and Consent Form for Women after b	oirth
(English version)	253
Appendix 9b: Participant Information Statement and Consent Form for Women after b	oirth
(Khmer version)	255
Appendix 10: A Guide for Participant Observation	257
Appendix 11: A Guide for In-depth Interviews with Public and Private SBAs	259
Appendix 12: A Guide for Focus Group Discussion with Public SBAs	262
Appendix 13: A Guide for In-depth interviews with Women after Birth	263
Appendix 14: Guide for In-depth Interviews with Key Stakeholders	265
Appendix 15: Materials for Member Checking (Focus Group Discussions)	266

### List of Tables

Table 1-1: Global Maternal Health Initiatives	8
Table 1-2: Timeline of Safe Motherhood Initiatives over the past 20 years	9
Table 1-3: The Cambodian MDG 5 Indicators and Targets in Cambodia	16
Table 1-4: Indicators and Progress towards MDG 5 in Cambodia	17
Table 1-5: Types of Staff for the Health Centres that Provide MPA1, MPA2, and MPA3	20
Table 1-6: Type of Staff for Hospitals that Provide CPA1, CPA2 and CPA3	21
Table 1-7: The Staff Involved in the Provision of Maternal Healthcare in Cambodia	24
Table 2-1: Different Types of Private Healthcare Providers in Developing Countries	38
Table 2-2: Seven Domains of the Essential ICM Competencies for Basic Midwifery Practice	50
Table 4-1 Demographic Characteristics of the Women who were observed	99
Table 4-2: Frequency and Proportions of Practices in the Women who were observed	106
Table 8-1: Details of the Staff Involved in the Provision of Maternal Care in Cambodia	162

## List of Figures

Figure 1-1: Global causes of maternal mortality5
Figure 1-2: Map of Cambodia13
Figure 1-3: Cambodia flag14
Figure 1-4: Causes of maternal mortality in Cambodia17
Figure 1-5: Organisational and Management Structure of the Health System in Cambodia19
Figure 2-1: Empirical relationships between determinants and outcomes of quality of care53
Figure 7-1: Demographic characteristics of the women who were observed at private facilities
Figure 7-2: Frequency and proportions of practices in the women who were observed144
Figure 10-1: A framework for coordinated action to improve maternal and newborn health in
Cambodia179

## List of Abbreviations

AMTSL	Active Management of the Third Stage of Labour
ANC	Antenatal Care
BEmOBC	Basic Emergency Obstetric Care
CDHS	Cambodia Demographic and Health Survey
СМА	Cambodian Midwives Association
CPA	Complementary Package of Activities
C-Section	Caesarean Section
CEmOBC	Comprehensive Emergency Obstetric Care
EmONC	Emergency Obstetric and Neonatal Care
FIGO	The International Federation of Gynaecology and Obstetrics
FGD	Focus Group Discussion
GTZ	Gesellschaft für Technische Zusammenarbeit
HREC	Health Research Ethics Committee
НС	Health Centre
HRH	Human Resources for Health
ICM	The International Confederation of Midwives
MoH	Ministry of Health
MNH	Maternal and Newborn Health
MCH	Maternal and Child Health
MDA	Maternal Death Audit
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
NECHR	National Ethics Committee for Health Research
NIPH	National Institute of Public Health
NGOs	Non government organizations
OD	Operational District
PHD	Provincial Health Department
PPH	Post-partum Haemorrhage
QAP	Quality Assurance Project
QI	Quality Improvement
RACHA	Reproductive and Child Health Alliance
RH	Referral Hospital
SBA	Skilled Birth Attendant
TBA	Traditional Birth Attendant
UN	United Nations

UNDESA	United Nations Department of Economic and Social Affairs
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNSW	University of New South Wales
USAID	United States Agency for International Development
UNTAC	United Nations Transitional Authority in Cambodia
URC	University Research Centre
UTS	University of Technology, Sydney
WB	World Bank
WHO	World Health Organization

#### Abstract

High-quality midwifery services, including access to skilled birth attendants (SBAs) and high quality emergency obstetric and neonatal care are essential for reducing maternal mortality worldwide. Yet there has been little emphasis in high-burden countries, such as Cambodia, on examining the actual practices of SBAs and women's experiences with the care they receive. This thesis examines the practices of public and private SBAs during labour, birth and the immediate post-partum period, their working environments, women's perspectives, and the quality improvement systems needed to maintain and support SBAs to deliver quality maternal and child care in Cambodia.

A qualitative, naturalistic inquiry design was undertaken, using participant observation, in-depth interviews, focus group discussions and informal interviews. Data were audiotaped, transcribed, and analysed using a thematic approach. A purposive sampling of twenty public SBAs who attended 40 births collectively and five private SBAs who attended 10 births was observed. Interviews and focus group discussions with public SBAs and interviews with private SBAs were conducted after the observation. Thirty interviews were conducted with women who had recently given birth with public and private SBAs. Key stakeholders consisted of five medical doctors from the Cambodian Ministry of Health, the Provincial Health Department and an NGO who were selected for interview.

The findings showed that childbirth practices of public and private SBAs were not consistent with evidence-based standards. Physical environment, remuneration and incentives, workplace culture, management practices, and professional development opportunities were identified as the main factors affecting SBAs' practice. Women's choice and use of health facilities were influenced by their perceptions of safety, staff attitudes, costs associated with the birth and support in labour and postnatal care. Stakeholder interviews identified facilitators and barriers to the implementation of a quality improvement system for maternity care in public health facilities.

This thesis provides evidence of the current childbirth practices of SBAs and the healthcare-seeking behaviour of women in Cambodia. It illustrates the complex factors

that influence SBAs' practice, their working environments and the delivery of a quality improvement system. An empirically informed framework for coordinated action to improve maternal and newborn health care is proposed. This framework focuses on building the capacity of SBAs and provides decision-makers, practitioners, key health partners and researchers with a tool to guide policy and target investments to maximise the impact upon maternal health improvement in Cambodia and other similar countries.