Pregnancy-related low back and pelvic girdle pain:

Listening to Australian women

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To the women in my care

Whether as a physiotherapist or a midwife, I have had the privilege of sharing an amazing part of your lives, helping you through struggles with back or pelvic girdle pain, to better enjoy your pregnancy and birth and fulfill your role as mothers, partners and friends. We have shared tears of frustration, pain and joy. Thankyou for listening, sharing your stories and for your encouragement.

This thesis is for you.

Certificate of Authorship/Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Candidate

Presentations

The preliminary results of this research have been reported as oral presentations at the following conferences and seminars during the course of this thesis:

July 2010: '*Breathing New Life into Maternity Care*'

3rd Biennial Conference, Australian College of Midwives with the Royal Australian and New Zealand College of Obstetricians and Gynaecologists and the Australian College of Rural and Remote Medicine, Alice Springs, NT, Australia

August 2010: Westmead Hospital Week, Sydney West Area Health Service, NSW, Australia

- Nursing and Midwifery Symposium
- Physiotherapy Symposium

The final results of this research will be shared as a poster presentation at the following meeting:

- *Melbourne International Forum XI: Primary Care Research on Low Back Pain,* 15th-18th March, 2011, Australia.

Preface

I have been working as a physiotherapist in women's health since the birth of my youngest child, who is now 17 years old. My journey in this area of health began with childbirth education, teaching women about the changes in their bodies during pregnancy and birth, the benefits of exercise, and strategies for coping with common 'discomforts' such as back pain. In 1997 I started conducting water exercise classes and physiotherapy consultations for pregnant women in response to the needs and queries of those who wanted to help in this area, and in 2000 I commenced working as a physiotherapist in continence and women's health at Westmead Hospital.

During this time I became increasingly frustrated with the apparent attitudes of some maternity carers to the women I was helping. Often I would pass these women in the corridors of the hospital, or they would come 'hobbling' into the postnatal physiotherapy class, explaining that they had had been told by their midwife or doctor: "Back pain is normal in pregnancy" or "There is nothing much you can do for your pain" and "Don't worry; it will go away after you have had the baby". Yet, on a daily practical level, physiotherapy made a significant positive impact on their lives.

Throughout my early years at Westmead Hospital, I often thought about doing postgraduate studies, possibly a Masters by research, but nothing ever really gelled. Then in May 2005, I was sitting reading the Sunday paper when I came across an article outlining an interview with Professor Caroline Homer, about a new course called the Bachelor of Midwifery. It was then that I instantly knew what I was to do. It didn't make any 'head' sense, but in my heart I knew it was right. I needed to be 'with woman' (Leap, 2006) not just before and after birth, but in every way, through the whole process. To possess not just an abstract physiological and biomechanical knowledge of pregnancy and birth, but to experience the complexities of childbirth first hand, and gain a better understanding of the health care system in which I was working.
The Bachelor of Midwifery Honours thesis has given me the opportunity of

exploring the lives of women in Western Sydney. I have been able to tap into the experiences of a few of the many women who pass through the doors of the Women's Health Clinic at Westmead Hospital each day. I have been able to investigate whether the literature that I had been reading on pregnancy-related lumbo-pelvic pain stood 'true' for my clinical setting. As a midwife, a physiotherapist and researcher, I have been able to 'listen' to and 'measure' the women's experience of low back and/or pelvic girdle pain. The thesis you are about to read is the end result of this journey: it is their story, and it is also my story.

The 'world view' that I hold of women, birth and maternity care has been shaped over the years by the medical system in which I trained and worked, and in which I experienced the birth of my own children. The Bachelor of Midwifery program has stretched, challenged and changed the thoughts and opinions that I have held about 'women' and 'birth' in many ways; however my core philosophy of serving my 'sister' and finding ways to help improve her health, and therefore her pregnancy and birth experience has never swayed. Through my experiences I have gained a profound respect for the midwives and doctors in our health care system, and for their dedication to the care of women, regardless of philosophy.

I am thankful for the academic process, as I have gained a better understanding of research and a greater appreciation of those who have ventured down this path. I can now read journal articles with a more critical eye, and an appreciation of the 'blood, sweat and tears' that would have gone into the finished product. I no longer just read the abstract, introduction and the conclusion, but find myself in the methods and discussion, questioning, agreeing and at times arguing with the authors.

My hope is that my journey into midwifery and this research thesis will have some impact on the lives of Australian childbearing women and on those who care for them. It has certainly impacted my life! Someone once said to me that an acorn starts as a small seed, but it will eventually grow into the most amazing tree. I look forward to standing in the shade of that tree, marveling at its beauty and size, and seeing all the new acorns that it will produce.

"…be quick to listen, slow to speak…"

James 1:19(NIV)

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Abstract

Background

Pregnancy-related low back and/or pelvic girdle pain (PLPP) is experienced by women in the lumbar and/or sacro-iliac area and/or symphysis pubis during pregnancy or immediately after birth. At least 45% of pregnant women experience PLPP which can be associated with some form of disability, leading to social and economic consequences for the woman and for health provider organisations. PLPP is often accepted as a 'normal' discomfort of pregnancy; however women may use analgesics and experience a reduced ability to maintain an active lifestyle. PLPP has been reported to negatively influence psychological health and some women develop a chronic pain condition.

Aim

The aim of this study was to investigate the prevalence of PLPP, and the associated pain and disability experienced by a sample of Australian women.

Method

A cross-sectional survey was employed with 105 pregnant women as they attended a public hospital antenatal clinic. Women reporting PLPP completed a second survey including a pain diagram, Visual Analogue Scale and the Oswestry Disability Index (Version 2.1a). A physical assessment differentiated low back, pelvic girdle or combined low back and pelvic girdle pain. Open ended questions explored the experiences of the women. The sample was analysed descriptively. The Pearson's Chi-Square was used to test the difference between groups for non-parametric data. A thematic analysis explored the open ended questions.

Results

The prevalence of self reported PLPP during the pregnancy was 71%, and on the day of survey was 34%. There was an association between the reporting of PLPP and multiparity ($p=0.05$), a previous history of lumbo-pelvic pain ($p=0.005$), and the regular use of stairs ($p= 0.04$). The average pain score was

6.5 (SD 2) out of 10 for ‘usual pain, and 3.8 (SD 3) on the day of the survey. A majority of women (67%) scored a ‘mild disability’ and had reported their pain to their maternity carer (71%) but only 25% had treatment. Almost a quarter (23%) of the women had taken sick leave because of PLPP. Most women (70%) agreed that PLPP was to be expected during pregnancy. Key themes related to PLPP as expressed by the women, were pain and its affect on lifestyle, psychological health and the woman’s ability to cope.

Conclusion

PLPP is highly prevalent and expected during pregnancy. Only a small proportion of women receive treatment, despite consequences for some in terms of pain, disability, lifestyle and psychological health. Dissemination of these findings to maternity carers may assist with recognition of the condition as a potentially significant health issue during pregnancy.

Acronyms

PLPP	Pregnancy related low back and/or pelvic girdle pain
LPP	Lumbo-pelvic pain
LBP	Low back pain
PGP	Pelvic girdle pain
SWAHS	Sydney West Area Health Service
WHO	World Health Organization
ABS	Australian Bureau of Statistics
PPPP	Posterior pelvic pain provocation test
VAS	Visual Analogue Scale
ODI	Oswestry Disability Index