

Women's use of complementary and alternative medicine products and services during pregnancy: Insights for safe, informed maternity care

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Technology Sydney

Certificate of original authorship

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.

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June 2015

Statement of contributions to jointly authored works contained in the thesis

The results from this thesis have been submitted for publication in peer-reviewed journals through five discrete manuscripts, presented in Chapters 4 through 8. For each of these papers, I have been primarily responsible for determining the research question, undertaking the analysis and drafting the manuscript.

I have received support in all of these areas by Professor Jon Adams, Professor David Sibbritt and Dr Jon Wardle. Dr Amie Steel has also assisted with data interpretation and final stages of manuscript drafting as needed. Professor Alex Broom and Professor Cindy Gallois have provided additional support with drafting and finalising the submitted/published manuscripts contained within this thesis.

I take full responsibility in the accuracy of the findings presented in these publications and this thesis.

Published works by the author incorporated into the thesis

Of the drafted manuscripts contained in this thesis, all have been submitted for publication of which two are published, two have been resubmitted with revisions and one is one under review. Following is the list of manuscripts contained in this thesis:

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4. Frawley J, Adams J, Steel A, Broom A, Gallois C, Sibbritt D (2015). Women's Use and Self-Prescription of Herbal Medicine during Pregnancy: An Examination of 1,835 Pregnant Women. *Women's Health Issues* (doi: 10.1016/j.whi.2015.03.001 Epub ahead of print).
5. Frawley J, Sibbritt D, Broom A, Gallois C, Steel A, Adams J. (Under review). Complementary and alternative medicine practitioner use prior to pregnancy predicts use during pregnancy: A longitudinal analysis. *Women & Health* (resubmitted with revisions 06/06/2015).

Other relevant published works by the author not forming part of the thesis

Journal articles

1. Frawley J, Sundberg T, Steel A, Sibbritt D, Broom A, Adams J (2015). Prevalence and characteristics of women who consult with osteopathic practitioners during pregnancy; a report from the Australian Longitudinal Study on Women's health (ALSWH). *Journal of Bodywork and Movement Therapies*, (In press).
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Abbreviations

ABS – Australian Bureau of Statistics

AHPRA – Australian Health Practitioners Regulation Agency

AIDS – Acquired Immunodeficiency Syndrome

AIHW – Australian Institute of Health and Welfare

ALSWH – Australian Longitudinal Study on Women’s Health

ART – assisted reproductive technologies

ARTG – Australian Register of Therapeutic Goods

ASGC - Australian Standard Geographical Classification

CAM – Complementary and alternative medicine

CI – Confidence interval

GP – General practitioner

HIV – Human immunodeficiency virus

HRT - hormone replacement therapy

HSR – Health services research

NCCAM - National Centre for Complementary and Alternative Medicine’s

NIH – National Institute of Health

OR – Odds ratio

PHI – private health insurance

RCT – Randomised-controlled trial

TGA – Therapeutic Goods Administration

US – United States

UK – United Kingdom

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Abstract

Aim: The aim of this project is to explore the use of complementary and alternative medicine (CAM) products and services by women during pregnancy, with a focus upon: determining the current prevalence of CAM use and examining the determinants, characteristics and attitudes of women who use CAM; investigating the utilisation of various information sources used by pregnant women to make decisions about the use of CAM; and examining the extent to which pregnant women choose to self-prescribe certain CAM products.

Method: The study sample was obtained via the Australian Longitudinal Study on Women's Health (ALSWH). The ALSWH is a longitudinal study of women in three age groups ("young" 18-23, "mid age" 45-50 and "older" 70-75 years), who were randomly selected from the Australian national Medicare database to investigate multiple factors affecting health and wellbeing of women over a 20-year period. This research project analyses data from a sub-study survey administered in 2010. Participants in the sub-study were identified based upon their reporting of being pregnant or as having recently given birth in the 2009 ALSWH Survey 5 (n=2,316) of the young cohort. A total of 1,835 women responded to the sub-study survey and were included in the analysis (79.2% response rate).

Results: CAM use during pregnancy is high with 91.7% (n=1,485) of women using a CAM product (52.0% excluding vitamins and minerals) and 48.1% (n=623) of women

consulting a CAM practitioner. CAM practitioner visits were more likely for selected pregnancy-related health concerns, namely back pain or backache, and neck pain. Employment was also found to be predictive of pregnant women's visits to a CAM practitioner. Significant health history and demographic predictors of CAM product use were tiredness and fatigue, embarking on preparation for labour and having a university education. Further analysis found that of the 447 women who did consult a CAM practitioner prior to pregnancy 62.4% (n=279) continued to utilise a CAM practitioner during pregnancy. Certain attitudes were found to be associated with women who use CAM products during pregnancy and women were more likely to use herbal medicine if they suffered from anxiety, sleeping problems and/or fatigue. The self-prescription of herbal medicine was also found to be widespread. Of the women deciding whether or not to visit a CAM practitioner, nearly half (48%, n=493) were influenced by their own personal experience of CAM and 43% (n=423) by family and friends.

Conclusion: CAM use by women during pregnancy is high. Maternity health care professionals need to inquire about CAM use during routine antenatal visits in order to ensure safe maternal outcomes.

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Appendix 6: Frawley J, Adams J, Steel A, Broom A, Gallois C, Sibbritt D (2015). Women's Use and Self-Prescription of Herbal Medicine during Pregnancy: An Examination of 1,835 Pregnant Women. *Women's Health Issues* (doi: 10.1016/j.whi.2015.03.001 Epub ahead of print). 372