

Women's use of complementary and alternative medicine for the treatment of menopause-related symptoms: A health services research study.

WENBO PENG

Australian Research Centre in Complementary and Integrative Medicine, Faculty of Health,
University of Technology Sydney

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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 Student:

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Wenbo Peng

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STATEMENT OF CONTRIBUTIONS TO JOINTLY AUTHORED WORKS CONTAINED IN THE THESIS

The results presented in this thesis have been submitted for publication in peer-reviewed journals through six articles (two literature review papers and four discrete original articles), presented in Chapter 2 and Chapter 4. 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 David Sibbritt and Professor Jon Adams. Dr Louise Hickman has provided support with final stages of manuscript drafting. Dr Jane Frawley has also assisted with drafting the 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 six papers included in this thesis, all have been published in the high quality peer-review journals. Following is the list of manuscripts contained in this thesis:

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ABBREVIATIONS

AHPRA – Australian Health Practitioners Regulation Agency

AIHW – Australian Institute of Health and Welfare

ALSWH – Australian Longitudinal Study on Women’s Health

CAM – Complementary and alternative medicine

CI – Confidence interval

FSH – Follicle-stimulating hormone

GP – General practitioner

HRT – Hormone replacement therapy

HSR – Health services research

LH – Luteinizing hormone

NCCAM – National Center for Complementary and Alternative Medicine

NIH – National Institute of Health

OCP – Oral contraceptive pill

OR – Odds ratio

RCT – Randomised controlled trial

SNRI – Selective norepinephrine reuptake inhibitors

SSRI – Selective serotonin reuptake inhibitors

TCM – Traditional Chinese medicine

TGA – Therapeutic Goods Administration

US – United States

WHI – Women’s Health Initiative

WHO – World Health Organisation

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ABSTRACT

Background: The use of complementary and alternative medicine (CAM) is increasingly popular and women are key drivers of this trend. To date, there has not been a nationally-representative study that has examined consultations with individual CAM practitioners as well as the self-prescription of CAM products, for a wide range of menopause-related symptoms, amongst women with different menopause status (surgical and natural menopause).

Methods: This study utilised two distinct methodologies: a critical review focusing on CAM use and menopause symptoms via a search of the key medicine and health science databases for peer-reviewed articles published in the previous 10 years; and secondary data analysis from the Australian Longitudinal Study on Women's Health – a cohort study designed to investigate multiple factors affecting women's health over a 20-year period. Data from two recent surveys from the 'mid-age' cohort women were analysed: women aged 56-61 in Survey 5 conducted in 2007 (n=10,638) and women aged 59-64 in Survey 6 carried out in 2010 (n=10,011). A combination of cross-sectional and longitudinal data analyses was employed, involving chi-square tests, multiple logistic regression and Generalised Estimating Equations, to examine associations between the use of various CAM modalities and products and menopause-related symptoms.

Results: The two critical reviews found that a considerable level of CAM use was observed among women in menopause and that many menopausal women use CAM concurrently with their conventional medicine. However, communication regarding CAM between menopausal women and healthcare providers seems less than optimal. Additionally, the varied methodological rigor of the existing literature on CAM use in menopause was evident. In the cross-sectional analyses, 39% (n=3,904) of menopausal women consulted a CAM practitioner, 75% (n=7,508) self-prescribed a CAM product, and 95% (n=9,510) consulted a general practitioner. Differences in consultations with CAM practitioners and the use of self-prescribed CAM were observed amongst women with hysterectomy, oophorectomy and natural menopause. Longitudinal analyses suggested the overall CAM use amongst menopausal women declined with time and was lower amongst women with hysterectomy or oophorectomy compared to natural menopausal women. Cross-sectional and longitudinal analyses found that associations

between CAM consultations/self-prescription and menopause-related symptoms were inconsistent across women with different menopause status.

Conclusions: This thesis presents empirical findings, in menopause care, regarding the use of CAM for menopause-related symptom management. This thesis highlights a need for future research to examine how menopausal women evaluate and make decisions related to the use of specific CAM.