WHEN LIFE’S A PAIN: PERCEIVED STRESS AND PSYCHOSOCIAL FACTORS IN WOMEN WITH ARTHRITIS TRANSITIONING FROM MIDLIFE TO OLDER AGE

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Melissa Harris                                      Date
Acknowledgements

You don’t create your mission in life - you detect it ~ Viktor Frankl ~

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Anyways, you need people of intelligence on this sort of ... mission... quest... thing
~ Pippin: The Lord of the Rings ~

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Turn your wounds into wisdom ~ Oprah Winfrey ~

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Where there is great love, there are always miracles ~ Willa Cather ~

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<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>ACR</td>
<td>American College of Rheumatology</td>
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<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<tr>
<td>ALSWH</td>
<td>Australian Longitudinal Study on Women’s Health</td>
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<tr>
<td>BMI</td>
<td>Body mass index</td>
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<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<tr>
<td>CI</td>
<td>Confidence interval</td>
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<td>GEE</td>
<td>Generalised Estimating Equation</td>
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<td>g/dl</td>
<td>Grams/decilitre</td>
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<td>GP</td>
<td>General Practitioner</td>
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<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<td>HPA</td>
<td>Hypothalamic-pituitary-adrenal</td>
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<td>HRQoL</td>
<td>Health-related quality of life</td>
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<td>HRT</td>
<td>Hormone replacement therapy</td>
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<td>Kg</td>
<td>Kilogram</td>
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<td>LOT-R</td>
<td>Life Orientation Test-revised</td>
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<td>m</td>
<td>Metre</td>
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<td>MET</td>
<td>Metabolic rate</td>
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<td>MRI</td>
<td>Magnetic resonance imaging</td>
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<tr>
<td>NHMRC</td>
<td>National Health and Medical Research Council</td>
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<tr>
<td>OA</td>
<td>Osteoarthritis</td>
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<td>OR</td>
<td>Odds ratio</td>
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Abstract

Arthritis represents an ongoing public health challenge. This disease contributes substantially to global healthcare expenditure and is a major cause of disability, limited mobility and chronic pain. The overarching aim of this thesis was to examine the contribution of perceived stress and associated psychosocial factors to the burden of arthritis and disease onset in a cohort of women transitioning from midlife to older age. In order to achieve these aims, a multi-method approach was applied.

Women from the 1946-1951 cohort of the Australian Longitudinal Study on Women’s Health (ALSWH) provided the sampling frame for all analyses contained within this thesis. Specifically, the first study aimed to determine the relative importance of psychosocial factors in arthritis diagnosis. This study focused on 10,509 women who responded to questions on arthritis in the fifth survey of the ALSWH conducted in 2007. Findings from this analysis indicated that arthritis was characterised by widespread psychosocial concerns, particularly relating to chronic stress and poor mental health. Following the adjustment for behavioural, demographic and health-related characteristics, anxiety was the only psychosocial factor associated with arthritis (OR=1.4, 95% CI=1.2, 1.7; p<0.001).

The second quantitative analysis aimed to examine the role of perceived stress as a risk factor for arthritis development. This analysis focused on 12,202 women from the 1946-1951 cohort who completed at least one ALSWH survey in either 2001, 2004 or 2007. Longitudinal analyses were modelled using Generalised Estimating Equations, with and without a time lag. Findings from these analyses indicate that perceived stress is a strong risk factor for arthritis, with both minimal (OR=1.7, 95%CI=1.5, 2.0; p<0.001) and moderate/high (OR=2.4, 95%CI=2.0, 2.9; p<0.001) levels of perceived stress contributing to the onset of arthritis three years later.

In order to provide a holistic view, the psychosocial experience of women with arthritis was qualitatively explored. This method provided a complementary approach to the quantitative analyses and allowed for the expansion and clarification of pertinent issues.
and provided the scope to examine factors that were not able to be examined at an epidemiological level. In-depth semi-structured telephone interviews using a realist-oriented framework were conducted with a sub-sample of the 1946-1951 cohort (n=19).

The aim of the first qualitative analysis was to explore the lived psychosocial experience of women with arthritis paying particular attention to identifying and clarifying psychosocial challenges to, and resources that facilitate, the adjustment to arthritis, including coping perceptions. The findings indicated that the emotional burden of arthritis is considerable, and the process of psychological adjustment complex. Importantly, women transitioning from midlife to older age have psychological difficulties associated with pain and functional impairment. Coping with pain and limitation involved the implementation of a myriad of strategies including a strong focus on self-management. Psychological adjustment over time was attributed primarily to cognitive and attitudinal factors. This was a dynamic 'day to day' process involving a constant struggle between grieving physical losses and increasing dependence amidst symptom management.

The second qualitative analysis aimed to extend the quantitative findings regarding perceived stress by exploring the stress appraisal process. The findings indicate that while women transitioning from midlife to older age experienced stressful life events varying in intensity and chronicity over the life course, they attributed particular meanings to the experience of stress and its role in chronic disease. For participants, coping with stress appeared to involve both static attitudinal coping processes developed early in life, coupled with stressor-dependent cognitive and support-based responses. Coping with stress over the life course, however, was complex, with women describing a dualistic process involving both a reduction in the ability to cope with ongoing stress over time, coupled with a degree of personal growth.

The findings from this multi-method thesis add to the current understanding of the burden associated with arthritis and highlight the important role of psychosocial factors in this process, particularly for women as they transition from midlife to older age. Findings from this thesis also provide the most convincing evidence to date regarding the role of perceived stress in the onset of arthritis. These findings highlight the insufficiencies associated with viewing arthritis within a biomedical model, both in terms of pathophysiology and disease management and have implications for clinical interventions, public health education and policy.