Australian Longitudinal Study on Women's Health



Submission to the Productivity Commission of Inquiry into Mental Health

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Introduction

We commend the Commonwealth Government on its commitment to support the Productivity Commission to undertake an inquiry into the role of mental health in supporting social and economic participation, and enhancing productivity and economic growth.

The Australian Longitudinal Study on Women's Health is a long-running survey that has tracked the health and health service use of women living across the country since 1996.

The study is a national research resource funded by the Australian Government Department of Health and managed by the University of Queensland and the University of Newcastle. ALSWH surveys women in four cohorts which encompass the adult lifespan; women born in 1989-95, 1973-78, 1946-51, and 1921-26. The Study's purpose is to provide scientifically valid information – based on current, accurate data – that is relevant to the development of health policy and practice in women's health.

In this submission, we present an overview of findings and policy recommendations from the ALSWH regarding mental health and health and productivity outcomes. This submission draws from the 2019 ALSWH report 'Policy Briefs from the Australian Longitudinal Study on Women's Health' prepared for the Australian Government Department of Health. The full report is available here: https://www.alswh.org.au/publications-and-reports/major-reports

This submission specifically contributes to the following assessment streams being undertaken by the Commission:

- The assessment of the consequences of mental ill-health, and the effectiveness of current and alternative programs.
- The changes that should be made in Australia's health sector to address specific concerns related to mental health, in particular recommendations for mental health promotion, prevention and early intervention, and comorbidities.

Research Findings on Mental Health in ALSWH Participants

Prevalence and trends

- All ALSWH cohorts have completed a general measure of mental health, in which higher scores reflect better health. Women aged 85-97 reported the best mental health (with an average score of 78)^{1,2}, followed by women aged 65-70 (average score of 77)³, then women aged 37-42 (average score of 72)⁴, and then women aged 22-27 (average score of 63).⁵
- As well as the differences between the cohorts, mental health improved within each cohort over time as the women aged, although a small group of women experienced chronically poor mental health in later life.^{4,6}
- Anxiety symptoms were more prevalent than depressive symptoms across the 1973-78, 1946-51 and 1921-26 cohorts.⁷
- Women in the 1989-95 cohort (aged 18-23 in 2013) had the worst mental health of the ALSWH cohorts. Specifically, they reported:
 - Higher levels of psychological distress and stress than women in the same age group in 1996, with the women who were younger and those with less than year 12 education indicating the highest distress and stress levels.
 - Around half (49%) reported high to very high levels of psychological distress.⁸
 - 59% reported feeling that life was not worth living at some point in their lives.
 While this was highest among women with less than year 12 education (78%),
 48% of those with a university education also reported suicidal thoughts.⁸
 - o 45% of women reported ever having self-harmed. Self-harm was more common among women with less than year 12 education, however one third of those with a university education reported self-harm.⁸
 - More than one in three women (35%) had been diagnosed with or treated for depression, and 28% had been diagnosed with or treated for anxiety. These diagnoses were most common among women with less than year 12

education, although the prevalence was still high among those with a university education.⁸

Mental health and violence and abuse

- Experiences of violence, abuse, and bullying in childhood and adulthood were associated with depression, anxiety, suicidal thoughts, and self-harm.
 - o 41% of women born 1973-78 reported adversity during childhood. These women had higher GP, allied and specialists healthcare costs (Medicare and out of pocket costs) in adulthood than women who did not experience adversity.⁹
 - Bodily pain, poor general health, and depression were associated with childhood sexual abuse. Women who experienced childhood sexual abuse visited their GPs frequently but were less likely than other women to report satisfaction with their GP services.^{5,10}
 - Approximately three in four women (72%) in the 1989-95 cohort reported having been bullied. Bullying was associated with adverse health behaviours, poor physical health, psychological distress, suicidal thoughts and self-harm.¹¹
 - O Women who experienced forced sex were more likely to have sleeping difficulties and take prescription sleep medication than women who had not experienced forced sex. Experiences of forced sex were also associated with illicit drug use, depression, anxiety, and self-harm.¹²
 - O Women who experienced domestic violence had consistently poorer mental health than women who had never experienced domestic violence. For example, 75% of women in the 1989-95 cohort who had experienced domestic violence had felt that life was not worth living at some point in their lives, compared with 53% of women who had not experienced domestic violence.¹³
 - o There was a lifetime deficit in mental health associated with domestic violence. This health deficit remained even after the abuse had ceased. 14

Mental health and socio-demographic characteristics and health behaviours

- Lower education, income stress, being unemployed, and not having a partner were associated with poor mental health in women born in 1946-51 and 1973-78.^{7,15, 16}
- Continuing education up to the age of 40 was protective against depressive symptoms.¹⁷
- Poor social support increased risk of poor mental health, and poor mental health increased risk of poor social support.^{7,18}
- Among women born in 1946-51, caring for others was associated with poor mental health.⁷
- Smoking, lower levels of physical activity, excessive alcohol consumption, and not being a healthy weight were associated with poor mental health across the 1973-78, 1946-51 and 1921-26 cohorts.^{7,15}
- Among women born in 1973-78, psychological distress was a predictor of subsequently taking up smoking. Smoking was also a predictor of subsequent psychological distress.¹⁶
- For the 1946-51 cohort, meeting and/or exceeding the national physical activity guidelines was associated with reporting less stress.^{19,20}
- For the 1921-26 cohort, factors associated with high sitting time and low physical activity levels included having more symptoms of anxiety and depression.²¹
- Higher levels of physical activity were associated with better current and future health-related quality of life, particularly physical functioning and vitality. Even if walking was their only activity, women in their 70s to 80s had better health-related quality of life²² and mental health.²³⁻²⁶
- Depression was associated with poor quality diet.²⁵⁻²⁸
- Consumption of a 'Mediterranean-style' or anti-inflammatory type of diet reduced women's risk of depression or depressive symptoms.^{29,30}

- Fruit intake at the recommended level of two pieces/day and eating 5 serves of vegetables per day had a protective effect on depressive symptoms in mid-aged women.³¹
- Dietary zinc intake was associated with lower risk of developing depression.³²

Mental health and physical health

- Frequent sleep difficulties were predictive of depression.³³
- A history of comorbid depression and anxiety was associated with the new onset of heart disease.³⁴
- Among middle aged women, depression was found to predict stroke.³⁵
- Stress and depression were found to play a role in the onset of arthritis among women born in 1946-51.¹⁵
- Depressive symptoms and a history of depression were associated with urinary incontinence among women born in 1973-78.³⁶

Mental health and reproductive factors and pregnancy

- Infertility was associated with depressive symptoms.³⁷
- Psychological distress was found to precede and co-occur with diagnoses of polycystic ovary syndrome and endometriosis.³⁸
- Women who had a hysterectomy and bilateral oophorectomy before their mid-to-late
 40s were more likely to have increasing depressive symptoms over time.³⁹
- Women with vasomotor symptoms (hot flushes, night sweats) were more likely to subsequently report depressed mood compared with those without these symptoms⁴⁰. Additionally women with depressed mood were more likely to experience subsequent vasomotor symptoms. In both situations this association was also related to sleep difficulties.⁴¹

- Women aged 47-52 years who had a hysterectomy or oophorectomy or used hormone therapy had higher depressive symptom scores than women of the same age group with natural menopause.³⁹
- Pregnancy loss was associated with poor mental health during subsequent pregnancies.⁴²
- There were disparities in access to routine perinatal depression screening and psychosocial assessment programs. For example, women who gave birth in the private maternity sector were less likely to be assessed across various domains of psychosocial health during pregnancy.⁴³
- Women who were asked by a health professional about their emotional health during the perinatal period were more likely to seek help and be referred for additional support than women who were not asked.^{44,45}
- Women who reported a history of depression and anxiety were more likely to report experiencing postnatal depression.⁴⁶

Mental health and health service use

- Poor mental health was associated with more GP consultations.¹⁵
- Uptake of Medical Benefits Schedule items for 'Better Access to Psychiatrists,
 Psychologists and General Practitioners' for mental health services (the Better Access
 scheme) increased over time. For women in the 1973-78 cohort, use of these items
 increased from 5% in 2007 to 11% in 2015. Even for women born in 1989-95, use of
 these items increased during their teens from 7% in 2009 to 13% in 2012.¹⁵
- Women with poor mental health living in regional and remote areas were less likely to use Better Access items than women living in metropolitan areas.⁴⁷
- Women with depression were less likely to have sought medical advice for fertility issues.⁴⁸

Recommendations for Policy

- Screening for mental health problems should be routine practice in all clinical settings because of the strong links with unhealthy behaviours, sexual and reproductive issues, and many chronic conditions.
- The high prevalence of mental health problems among young women underscores the importance of the Better Access MBS items. The availability of these items and other mental health support services should be improved for disadvantaged women, especially those living outside major cities.
- Updates of the current National Tobacco Strategy (2012-2018) should continue to recognise the social and health inequalities associated with tobacco use, especially the need to reduce smoking dependence among people with mental health problems.
- Prevention of domestic violence is a priority for improving women's health. However, even if domestic violence ceases, many Australian women will continue to experience health problems associated with past domestic violence. We need to determine how we can implement and augment existing programs using a strengths-based approach.
- Data items on depression/anxiety screening in the antenatal period, psychosocial referral in the antenatal period, presence or history of a mental health condition (as well as items on alcohol use and domestic violence) should be included in the Perinatal National Minimum Dataset.
- Prevention, detection and treatment of poor mental health prior to child bearing and during pregnancy are recommended to reduce the incidence of postnatal depression.
- Public health policies geared towards increasing adherence to physical activity (or increasing PA levels generally) should prioritise women of lower socioeconomic status, Asian-born women, women with children, women at risk of developing chronic conditions, and women with poorer mental health.

The ALSWH policy briefs on mental health and its associations with violence, abuse, sociodemographic characteristics, health behaviours, physical health, reproductive factors, pregnancy and health service use were prepared by:

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References

- 1. ALSWH. *Data book for the 1921-26 cohort* (Surveys 1-6). 2016.
- 2. ALSWH. Data book for the 1921-26 cohort (Six Monthly Follow-Up surveys). 2016.
- 3. ALSWH. *Data book for the 1946-51 cohort.* 2017.
- 4. ALSWH. Data book for the 1973-78 cohort. 2016.
- 5. ALSWH. *Data book for the 1989-95 cohort.* 2018.
- 6. Leigh L, Byles JE, Chojenta C & Pachana NA. Late life changes in mental health: A longitudinal study of 9683 women. *Aging & Mental Health*. 2015; 20(10):1044-1054.
- 7. Holden L, Dobson A, Byles J, Loxton D, Dolja-Gore X, Hockey R, Lee C, Chojenta C, Reilly N, Mishra G, McLaughlin D, Pachana N, Tooth L, & Harris M. (2013). *Mental Health: Findings from the Australian Longitudinal Study on Women's Health*. Report prepared for the Australian Government Department of Health, May 2013.
- 8. Mishra G, Loxton D, Anderson A, Hockey R, Powers J, Brown W, Dobson A, Duffy L, Graves A, Harris M, Lucke J, McLaughlin D, Mooney R, Pachana N, Pease S, Tavener M, Thomson C, Tooth L, Townsend N, Tuckerman R & Byles J. (2014). *Health and wellbeing of women aged 18 to 23 in 2013 and 1996: Findings from the Australian Longitudinal Study on Women's Health.* Report prepared for the Australian Government Department of Health, May 2014.
- 9. Loxton D, Townsend N, Dolja-Gore X & Forder P. (2018). Adverse childhood experiences and healthcare costs in adult life. *Journal of Child Sexual Abuse*, (Accepted for publication).

- 10. Coles J, Lee A, Taft A, Mazza D & Loxton D. (2015). General practice service use and satisfaction among female survivors of childhood sexual abuse. *Australian Family Physician*, 44(1-2): 71-6.
- 11. Townsend N, Powers J & Loxton D. (2017). Bullying among 18 to 23-year-old women in 2013. *Australian and New Zealand Journal of Public Health*, 41(4): 394-8.
- 12. Astbury J, Bruck D & Loxton D. (2011). Forced sex: a critical factor in the sleep difficulties of young Australian women. *Violence Victims*, 26(1): 53-72.
- 13. Mishra G, Loxton D, Anderson A, Hockey R, Powers J, Brown W, Dobson A, Duffy L, Graves A, Harris M, Harris S, Lucke J, McLaughlin D, Mooney R, Pachana N, Pease S, Tavener M, Thomson C, Tooth L, Townsend N, Tuckerman R & Byles J. (2014). *Health and wellbeing of women aged 18 to 23 in 2013 and 1996: Findings from the Australian Longitudinal Study on Women's Health*. Report prepared for the Australian Government Department of Health, May 2014.
- 14. Holden L, Dobson A, Byles J, Loxton D, Dolja-Gore X, Hockey R, Lee C, Chojenta C, Reilly N, Mishra G, McLaughlin D, Pachana N, Tooth L & Harris M. (2013). *Mental Health: Findings from the Australian Longitudinal Study on Women's Health*. Report prepared for the Australian Government Department of Health, May 2013.
- 15. Byles J, Hockey R, McLaughlin D, Dobson A, Brown W, Loxton D & Mishra G.(2015).
 Chronic conditions, physical function and health care use: Findings from the Australian
 Longitudinal Study on Women's Health. Report prepared for the Australian
 Government Department of Health, June 2015.
- 16. Leung J, Gartner C, Hall W, Lucke J & Dobson A. (2012). A longitudinal study of the bidirectional relationship between tobacco smoking and psychological distress in a community sample of young Australian women. *Psychological Medicine*, 42(6): 1273-82.
- 17. Tooth L & Mishra GD. (2015). Does further education in adulthood improve physical and mental health among Australian women? A longitudinal study. *PLoS One*, 10(10): e0140334.

- 18. Holden L, Dobson AJ, Ware RS, Hockey R & Lee C. (2015). Longitudinal trajectory patterns of social support: correlates and associated mental health in an Australian national cohort of young women. *Quality of Life Research*, 24(9): 2075-86.
- 19. Pavey TG, Kolbe-Alexander TL, Uijtdewilligen L & Brown WJ. (2017). Which women are highly active over a 12-year period? A prospective analysis of data from the Australian Longitudinal Study on Women's Health. Sports Medicine, 47(12): 2653-66.
- 20. Williams L, Germov J & Young A. (2011). The effect of social class on mid-age women's weight control practices and weight gain. *Appetite*, 56(3): 719-25.
- 21. van Uffelen JG, Heesch KC, van Gellecum YR, Burton NW & Brown WJ. (2012). Which older women could benefit from interventions to decrease sitting time and increase physical activity? *Journal of the American Geriatrics Society*, 60(2): 393-6.
- 22. Heesch KC, van Uffelen JG, van Gellecum YR & Brown WJ. (2012). Which older women could benefit from interventions to decrease sitting time and increase physical activity? *Journal of Epidemiology and Community Health*, 66(8): 670-7.
- 23. Brown WJ, Ford JH, Burton NW, Marshall AL & Dobson AJ. (2005). Prospective study of physical activity and depressive symptoms in middle-aged women. *American Journal of Preventive Medicine*, 29(4): 265-72.
- 24. Heesch KC, Burton NW & Brown WJ. (2011). Concurrent and prospective associations between physical activity, walking and mental health in older women. *Journal of Epidemiology and Community Health*, 65(9): 807-13.
- 25. Heesch KC, van Gellecum YR, Burton NW, van Uffelen JG & Brown WJ. (2015). Physical activity, walking, and quality of life in women with depressive symptoms. *American Journal of Preventive Medicine*, 48(3): 281-91.
- 26. Heesch KC, van Gellecum YR, Burton NW, van Uffelen JGZ & Brown WJ. (2016). Physical activity and quality of life in older women with a history of depressive symptoms. *Preventive Medicine*, 91: 299-305.

- 27. Peeters GM, Beard JR, Deeg DJ, Tooth LR, Brown WJ & Dobson AJ. (2018). Longitudinal associations between lifestyle, socio-economic position and physical functioning in women at different life stages. *European Journal of Ageing*, Epub date 02/08/2018.
- 28. Peeters G, Lips P & Brown WJ. (2014). Changes in physical functioning over 6 years in older women: effects of sitting time and physical activity. *European Journal of Ageing*, 11(3): 205-12.
- 29. Rienks J, Dobson AJ & Mishra GD. (2013). Mediterranean dietary pattern and prevalence and incidence of depressive symptoms in mid-aged women: Results from a large community-based prospective study. *European Journal of Clinical Nutrition*, 67(1): 75-82.
- 30. Shivappa N, Schoenaker DA, Hebert JR & Mishra GD. (2016). Association between inflammatory potential of diet and risk of depression in middle-aged women: The Australian Longitudinal Study on Women's Health. *British Journal of Nutrition*, 116(6): 1077-86.
- 31. Mihrshahi S, Dobson AJ & Mishra GD. (2015). Fruit and vegetable consumption and prevalence and incidence of depressive symptoms in mid-age women: Results from the Australian longitudinal study on women's health. *European Journal of Clinical Nutrition*, 69(5): 585-91.
- 32. Vashum KP, McEvoy M, Milton AH, McElduff P, Hure A, Byles J & Attia J. (2014). Dietary zinc is associated with a lower incidence of depression: Findings from two Australian cohorts. *Journal of Affective Disorders*, 166: 249-57.
- 33. Jackson ML, Sztendur EM, Diamond NT, Byles JE & Bruck D. (2014). Sleep difficulties and the development of depression and anxiety: A longitudinal study of young Australian women. *Archives of Women's Mental Health*, 17(3): 189-98.
- 34. Berecki-Gisolf J, McKenzie SJ, Dobson AJ, McFarlane A & McLaughlin D. (2013). A history of comorbid depression and anxiety predicts new onset of heart disease. *Journal of Behavioral Medicine*, 36(4): 347-53.
- 35. Jackson CA & Mishra GD. (2013). Depression and risk of stroke in midaged women: A prospective longitudinal study. *Stroke*, 44(6): 1555-60.

- 36. Mishra GD, Barker MS, Herber-Gast GC & Hillard T. (2015). Depression and the incidence of urinary incontinence symptoms among young women: Results from a prospective cohort study. *Maturitas*, 81(4): 456-61.
- 37. Herbert DL, Lucke JC & Dobson AJ. (2010). Depression: An emotional obstacle to seeking medical advice for infertility. *Fertility and Sterility*, 94(5): 1817-21.
- 38. Rowlands IJ, Teede H, Lucke J, Dobson AJ & Mishra GD. (2016). Young women's psychological distress after a diagnosis of polycystic ovary syndrome or endometriosis. *Human Reproduction*, 31(9): 2072-81.
- 39. Hickey M, Schoenaker DA, Joffe H, Mishra GD. (2016). Depressive symptoms across the menopause transition: Findings from a large population-based cohort study. *Menopause*, *23*(12): 1287-93.
- 40. Kanesarajah J, Waller M, Whitty J & Mishra G. (2017). The relationship between SF-6D utility scores and lifestyle factors across three life stages: Evidence from the Australian Longitudinal Study on Women's Health. *Quality of Life Research*, 26(6): 1507-19.
- 41. Chung HF, Pandeya N, Dobson A, Kuh D, Brunner EJ, Crawford SL, Avis N, Gold E, Mitchell E, Woods N, Bromberger J, Thurston R, Joffe H, Yoshizawa T, Anderson D & Mishra G. (2018). The role of sleep difficulties in the vasomotor menopausal symptoms and depressed mood relationships: An international pooled analysis of eight studies in the InterLACE consortium. *Psychological Medicine*: DOI: 10.1017/S0033291718000168.
- 42. Chojenta C, Harris S, Reilly N, Forder P, Austin MP & Loxton D. (2014). History of pregnancy loss increases the risk of mental health problems in subsequent pregnancies but not in the postpartum. *PLoS One*, 9(4): e95038.
- 43. Reilly N, Harris S, Loxton D, Chojenta C, Forder P, Milgrom J & Austin M-P. (2013). Disparities in reported psychosocial assessment across public and private maternity settings: A national survey of women in Australia. *BMC Public Health*, 13: 632.
- 44. Reilly N, Harris S, Loxton D, Chojenta C, Forder P & Austin MP. (2014). The impact of routine assessment of past or current mental health on help-seeking in the perinatal period. *Women and Birth*, 27(4): e20-7.

45. Reilly N, Harris S, Loxton D, Chojenta C, Forder P, Milgrom J & Austin M-P. (2013).

Referral for management of emotional health issues during the perinatal period: Does

mental health assessment make a difference? Birth, 40(4): 297-306.

46. Chojenta CL, Lucke JC, Forder PM & Loxton DJ. (2016). Maternal health factors as risks

for postnatal depression: A prospective longitudinal study. PLoS One, 11(1): e0147246.

47. Dolja-Gore X, Loxton DJ, D'Este CA & Byles JE. (2014). Mental health service use: Is

there a difference between rural and non-rural women in service uptake? Australian

Journal of Rural Health, 22(3): 92-100.

48. Herbert DL, Lucke JC & Dobson AJ. (2010). Depression: An emotional obstacle to

seeking medical advice for infertility. Fertility and Sterility, 94(5): 1817-21.

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A detailed description of the background, aims, themes, methods, and representativeness of

the sample and progress of the study is given on the project website. Copies of surveys are

also available on the website, along with contact details for the research team, abstracts of

all papers published, papers accepted for publication, and conference presentations.

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