

# Submission to the Standing Committee on Community Affairs, Inquiry into issues related to menopause and perimenopause.

Prepared By

**HER CENTRE AUSTRALIA**



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## **Submission to the Standing Committee on Community Affairs, Inquiry into issues related to menopause and perimenopause.**

To the Senate Inquiry Committee,

Thank you for the opportunity to make a submission for this inquiry.

### **This submission focuses on menopause and mental health and makes the following key points:**

- a. The prevalence and impact of menopausal mental ill health is enormous. Up to 65% of menopausal women can have anxiety, depression and/ or 'brain fog'
- b. Existing survey methodology clouds the true severity and urgency of mental illness many women are experiencing and hence the urgency and insights on their mental health needs is being undermined by general surveys
- c. The lack of integrated diagnosis denies women an integrated model of care, including mental health care
- d. There is a considerable lack of clarity of information and advice for women
- e. The historical impacts of gender inequality, with discriminatory attitudes and economic and social inequality, constrain a reframed, women centred approach to menopause

### **This submission makes the following key recommendations:**

1. New clinical research is urgently needed – especially clinical trials for treatment of menopausal mental ill health with hormone therapy.
2. Clinical education about treatment of menopausal mental disorders is urgently needed for primary healthcare practitioners and mental health care workers
3. Build an allied workforce with peer workers
4. Provide better access to care, access to safe and credible information.
5. Improve the visibility of women, especially in middle-aged women's health and mental health.

### **Background**

I am a Consultant Psychiatrist, Professor of Psychiatry and Clinical Researcher with expertise in women's mental health. I set up and direct HER Centre Australia, which is a Monash University Centre dedicated to providing Health services, Education and Research in women's mental health, with clinical partners in Alfred Health and Cabrini Health, Victoria. I established Australia's first women's mental health hospital in Cabrini in September 2021. HER Centre Australia's Patron is the Governor of Victoria, the Honourable Professor Margaret Gardner. I make this submission on behalf of myself and my colleagues from HER Centre Australia.

My colleagues and I have been working in menopause and mental health for several decades. I am one of the very few Psychiatrists worldwide with expertise in the impact of gonadal hormone shifts on mental health. The main gonadal hormones - estrogen, progesterone, and testosterone - are major brain steroids and undoubtedly have a profound impact on mental health. There is a significant neuroscientific knowledge base to support the adverse brain effects of fluctuating gonadal hormones, at menopause. However, in Australia and globally, menopause is characteristically viewed as predominantly impacting women's bodies with hot flushes as the key symptom.

The area of menopausal mental ill health – especially depression, anxiety, and cognitive changes ('brain fog') – has been misunderstood and neglected. Midlife women suffer from increased rates of depression and anxiety, high suicidality, and poor response to standard antidepressant treatment. As a result, they retire from paid work too early with significant adverse economic outcomes for them and our whole nation, experience domestic relationship breakdown and can struggle with parenting adolescent children or caring for elderly family members.

I have worked as a clinician and researcher for decades to develop hormone therapy for women with menopausal depression to improve their mental health function. It is common sense after all that if the 'tipping point' in a woman's life in terms of her mental health, coincides with the menopause brain hormone changes, then treatment with hormones seems obvious.

This submission will mainly focus on the particular issue labelled: "c. The mental and emotional well-being of individuals experiencing menopause and perimenopause, considering issues like mental health, self-esteem, and social support"

**It is high time that we recognise the impact menopause has on mental health – which in turn underpins several physical health and socioeconomic issues.**

I am making this submission because as a doctor and psychiatrist, I continue to be horrified by the appalling stories, I see and hear in my Clinic and hospital - of damage, despair, and death, in middle-aged women, due to unrecognised and untreated menopausal mental illness. There are relatively easy solutions, which need to be highlighted and implemented, by empowered women and enlightened healthcare clinicians.

Yours sincerely,

Professor Jayashri Kulkarni AM  
Director, HER Centre Australia  
Monash University & Alfred Health & Cabrini Health

## OUR SUBMISSION

# C The mental and emotional well-being of individuals experiencing menopause and perimenopause, considering issues like mental health, self-esteem, and social support;

## EXECUTIVE SUMMARY

**This submission in expanding on section 'c' makes the following key points:**

- a. The prevalence and impact of menopausal mental ill health is enormous. Up to 65% of menopausal women have anxiety, depression and/ or 'brain fog'
- b. Existing survey methodology clouds the data on the severity and urgency of mental illness women are experiencing and hence the urgency and insights on their mental health needs is undermined
- c. The lack of integrated diagnosis denies women an integrated model of care, including mental health care
- d. There is a considerable lack of clarity of information and advice for women
- e. The historical impacts of gender inequality, with discriminatory attitudes and economic and social inequality, constrain a reframed, women centred approach to menopause

**This submission makes the following key recommendations:**

1. New clinical research is urgently needed – especially clinical trials for treatment of menopausal mental ill health with hormone therapy.
2. Clinical education about treatment of menopausal mental disorders is urgently needed for primary healthcare practitioners and mental health care workers
3. Build an allied workforce with peer workers
4. Provide better access to care, access to safe and credible information.
5. Improve the visibility of women, especially in middle-aged women's health and mental health.

# C The mental and emotional well-being of individuals experiencing menopause and perimenopause, considering issues like mental health, self-esteem, and social support;



## OUR SUBMISSION IN DETAIL

Middle-aged women, compared to other age groups of women, experience significant increases in depression, anxiety, post-traumatic stress disorder, and substance use and as a demographic cohort have a high suicide rate (Blazer et al., 1994; Tangen and Mykletun, 2008; Dennerstein et al., 2004; Cohen et al., 2006; Maki et al., 2019). Yet this group's specific needs remain somewhat invisible and unmet (Kulkarni 2022, 2023). For decades, the global rise in midlife mental ill health has been considered to be a product of the complexity of women's lives. Social determinant theories about midlife depression in women detail the cause as stresses experienced in many domains including paid and unpaid

workplaces, intimate relationships, raising children, caring for sick or elderly family members, maintaining social networks and being concerned with ageing in a youth-oriented society (Cohen et al., 2006; Austen and Viforj, 2010; Pimenta et al., 2012).

No doubt many middle-aged women juggle all of these factors—but the social determinant theories do not explain the sudden onset of severe anxiety, change in mood and difficulties with cognition that occur all too commonly. Some women experience mental ill health for the first time in their mid-40s, while others with previously well-managed depression suddenly find their mental health explodes out of their control. It is apparent that for a significant

proportion of the middle-aged female population, menopause is the 'tipping factor' that has caused a significant change in mental health and subsequent deterioration in quality of life. When menopause is discussed in our community, the most common symptom known includes hot flashes, cessation of periods, and an end of fertility. However, these are menopause-end symptoms and signs. Mental health symptoms are often experienced at the beginning of the menopause transition and are poorly recognised. This can lead to inadequate treatment of persistent mental ill health, with resultant loss of quality of life, and suicide in the worst situations.

## What are the main brain impacts of menopause?

During the long menopausal process (8-10 or more years), there are several key gonadal hormone shifts. The key hormones that fluctuate during menopause include estrogen, progesterone, testosterone and the precursors to these important brain steroids (Herson and Kulkarni, 2022). It is critical to note that these hormones are potent neurosteroids and have multiple, critical roles in the brain. This is often overlooked or misunderstood, with a common false belief that these hormones mainly impact ovaries, uterus and breast tissue.

Estrogen is intricately involved with the modulation of critical mood and cognition neurotransmitters such as serotonin, dopamine, glutamate, acetylcholine,  $\gamma$ -aminobutyric acid (GABA) and the opioid pathways in the brain (Barth et al., 2015). As well, estrogen has a role in maintaining neural circuits and synapses (Bustamante-Barrientos et al., 2021). Progesterone has a key role in modulating the GABA-ergic system and has a critical role in anxiety moderation (Bitran et al., 1995). Testosterone is converted to estrogen in the brain and modulates key neurotransmitter systems, including libido.

All of the key neurosteroid hormone levels fluctuate during menopause, causing destabilising effects on neurotransmitters and brain circuitry. The expression of this destabilisation varies widely between individuals so that some experience debilitating mental health changes while others have compensatory mechanisms that enable minimal or no impact on mental health. The compensatory mechanisms include biological and social factors that can either promote mental health or create serious mental illnesses.

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## Why are the mental health issues of menopause under recognised?

The increasing body of neuroscientific data and knowledge on the effects of fluctuating brain steroids such as estrogen and resultant mental health effects should inform our understanding of menopausal anxiety and depression. Using this knowledge, we can understand menopausal anxiety, depression and cognition changes to be a different form of mental health shift, that needs a different approach to standard anxiety and depression. However, the lack of mainstream neurobiological knowledge has hampered our understanding of menopausal mental health issues.

Further confounding the lack of recognition is the preponderance of population-wide surveys to determine the prevalence of menopausal depression. Considerable funding has been expended on this research which yields different results depending on the mental illness definitions used. This type of population survey inevitably produces averaged results that disservice the significant number of women with serious mental health issues.

## Continued.

Clearly, there are huge numbers of women who do not experience mental ill health related to menopause, and when their survey answers are combined with the smaller number of depressed women, an average picture of good mental health is presented. Current survey figures describe between 10% to 65% of all menopausal women surveyed experience mental ill health of varying severity (Maki et al., 2019; Freeman, 2015). The exact percentage varies but is somewhat irrelevant since we have a responsibility to understand and assist any *and* all women who experience significant mental ill health. Survey results should therefore not inform treatment guidelines or be used to dismiss women experiencing menopausal mental health issues.

Added to this, is the lack of definitive laboratory tests to diagnose menopausal depression, coupled with vague definitions of the 'perimenopause', overlooks major mental health challenges. Routine blood tests of peripheral hormone levels will not provide details of brain fluctuations of the gonadal hormones and their impact on neurochemistry. However, listening carefully to the woman experiencing mental health changes through a comprehensive clinical history often reveals sudden mental health shifts around their mid-40s, prompting consideration for menopause onset when other evidence causal factors are lacking. Our rating scale – called the MENO-D has assisted in diagnoses (Kulkarni 2018) but an objective blood test is urgently needed. A hormone treatment strategy along with other psychosocial interventions may provide the desired outcome for the woman, but this is rarely offered. More commonly, standard antidepressant medications are prescribed with partial efficacy (Kim and Joffe, 2006; NICE, 2015).

**There is a high  
rate of suicide in  
women aged  
45-54 years.**



# Optimal Treatment of Menopause Mental Health Issues

The use of menopause hormone therapy (MHT) is a much-debated topic. In particular, its use for the treatment of menopause-related mental health issues is not approved in most menopause guidelines, except for the NICE guidelines (NICE, 2015), that have a vague reference to menopause hormone therapy being useful in menopausal mental health. The reasons for the reluctance are based on;

1. **historical beliefs that mental health issues are not related to menopause hormone shifts,**
2. **a lack of clinical trials' evidence for menopause hormone therapy use in menopause mental ill health conditions, and**
3. **residual concerns over the Women's Health Initiative (WHI) studies from 2002 (Rossouw et al., 2002).**

To refute these in turn: continuing neuroscience evidence shows clear roles for gonadal hormones as potent brain steroids (Fester and Rune, 2021; McEwen and Parsons, 1982) - hence common sense dictates that menopause hormone therapy is a useful treatment when mental ill health is caused by menopausal hormone shifts. Unfortunately, few clinical trials are comparing MHT to antidepressant therapy in

menopausal depression and anxiety - but the reason for this is because of the prevailing erroneous view that hormone fluctuations do not cause mental ill health, which then directs limited research funding into other areas. We have conducted trials showing efficacy of menopause hormone therapy in depression, but larger replication studies are needed (Kulkarni, 2018).

Lastly, the WHI findings have been severely criticised and should not inform current menopause hormone therapy practice. However, the sensationalist newspaper headlines in 2002 about the Women's Health Initiative study claiming that hormone therapy caused breast cancer and cardiovascular disease, unfortunately seem to have lingered in the memories of the public and some clinicians too.

## The Politics of Menopause

Menopause is inevitable for all people assigned female at birth (who reach menopausal age). Half of the world's population experiences menopause and inevitably there are many different views about this biological event with its diverse psychosocial and cultural associations. In Australia, the topic of menopause has undergone generational shifts in attitude. For centuries, the approach to menopause was that it is a 'secret women's business' and engendered a sense of shame in middle-aged women. This shame was often about the loss of fertility and ageing, which was equated with becoming a 'burden' on the community.

The life expectancy of women increased by more than 20 years compared to last century and the nature of women's working life dramatically changed in that time with the feminism movement. The first wave of feminism in the 1960s and onwards changed the roles that women 'were allowed' to play in the workforce and at home.



## Continued.

However, the attitude to menopause driven by the earlier feminists was to urge women to be quiet about menopause or any hormone-related issues such as perinatal depression or premenstrual depression – for fear that women would be seen as being driven by their hormones and hence would not be allowed to play senior roles in the workforce.

Sadly, this attitude, although understandable in its time, is still prevalent and does not assist women to understand menopausal mental health issues and receive optimal help. It also propagates the belief that men decide what women are permitted to do in Australia. Other ideologies, include the concern that in raising issues about menopausal mental ill health or hormone therapy, the natural process of menopause is being 'pathologised' or 'medicalised'. This has its origins in concerning past medical practices where women received unnecessary interventions for childbirth and infant feeding, and widespread hormone replacement therapy was prescribed for healthy middle-aged women.

These views were important for women to take charge of their own bodies and roles, but it is now time for a new approach to menopause that gives women greater command over their mental and physical health as well as all of their diverse roles.

## A New Approach for Menopause Mental Health



As with other mental health areas, the person with lived experience must be a key driver and collaborator in determining what treatment approaches she wants. In the area of menopause mental health, the woman experiencing hormone-created anxiety, depression, cognitive changes (known as 'brain fog') and physical health issues related to menopause needs to decide what her care programme includes, based on well-informed options.

Many women are not aware that the menopausal process can have major impacts on mental health, which means that community education programmes need to include this information. Menopause hormone therapy is an important part of the treatment options for menopause mental health issues. The newer forms of menopause hormone therapy given in safer delivery modes potentially offer better outcomes for menopause mental and physical health issues. Coupled with comprehensive baseline and follow-up investigations, menopause hormone therapy may provide better resolution of menopausal depression, anxiety and 'brain fog' than current psychotropic medications that provide partial relief but have many side effects. Of course, healthy lifestyle advice, psychotherapy where desired, and good physical health measures all have a part to play in helping women achieve their goals in their midlife years. Critically, it is the woman herself who needs to decide what the risks and benefits are for all treatments, with information from her professional treating teams.

# Solutions

To facilitate a change in current menopause hormone therapy (MHT) guidelines to recommend hormone treatment use in menopausal mental health issues, we urgently need the following:

## Clinical Research



To conduct relevant clinical trials, such as a 'head-to-head' comparison of hormone therapy (estrogen + progesterone) with antidepressants and with a combination of both. Trial design is relatively simple but to date, funding has not been available for this. Globally, clinical treatment trials with hormone therapy in depression have not been of good quality. Australia can lead the world in this area and such data would provide an evidence base for hormone therapy in mental ill health.



To conduct basic science research to develop biomarkers to detect the early warning fluctuations in gonadal hormone functioning – to provide an objective test for the diagnosis of perimenopause. We can utilise knowledge from repeated blood glucose sampling techniques in diabetes to further develop such hormone testing.

Urgent need for education of mental health and primary health practitioners about menopause-related mental health issues and hormone therapy to enable more options to be discussed with women they are treating. Far too many mental health practitioners are unaware of the hormone – mental health link, and far too many primary health care practitioners still cling to debunked evidence against hormone therapy from the 2002 Women's Health Initiative study. We need to educate all our communities about menopause using multimedia channels.



Develop 'peer workers' in menopause mental health since true innovation is only possible when the woman with lived experience of menopause is front and centre of this debate.



## Other Areas Impacted

### **The economic consequences of menopause and perimenopause, including but not limited to, reduced workforce participation, productivity and retirement planning;**

As briefly discussed above, good mental health underpins good productivity and workforce participation. Women with menopausal mental ill health have high absenteeism due to depression, anxiety and 'brain fog' – leading to forced cessation of work or early retirement. The economic consequences are profound.

### **The physical health impacts, including menopausal and perimenopausal symptoms, associated medical conditions such as menorrhagia, and access to healthcare services;**

Estrogen is a potent hormone for many body functions- including muscle and joint health, skin issues, immune system stability, bone health, bladder health, vaginal health and many brain systems impacts. Fluctuating and diminishing estrogen levels have profound physical health consequences that many practitioners are unaware of. Progesterone and testosterone similarly impact a great number of systems.

### **The impact of menopause and perimenopause on caregiving responsibilities, family dynamics, and relationships.**

Women with significant

depression, anxiety and brain fog describe the huge adverse impact their mental ill health has on their families and relationships. A key symptom of this type of depression is reduced self – esteem, rage and swinging moods. Given the length of time that the menopause transition can take (8-10 years) – it is not surprising that relationships suffer.

### **The cultural and societal factors influencing perceptions and attitudes toward menopause and perimenopause, including specifically considering culturally and linguistically diverse communities and women's business in First Nations communities;**

Other submissions will have greater expertise in this area.

### **The level of awareness amongst medical professionals and patients of the symptoms of menopause and perimenopause and the treatments, including the affordability and availability of treatments;**

It is abundantly clear that the concept of 'menopausal depression' remains unknown to many primary care practitioners and mental health clinicians. The Royal Australian and New Zealand College of Psychiatrists carry very little information about this subject in their current mood treatment guidelines and it is critical that more information is urgently needed for this key group of medical practitioners.

Unfortunately, the Australian Menopause Society and The International Menopause Society guidelines do not carry useful recommendations or information for practitioners on the hormone treatments for menopause related mental ill health. Information in the current guidelines relies on standard treatments for depression and lifestyle changes – which have limited impact. In offering women with significant depression, anxiety and brain fog menopausal hormone therapy, the outcomes may be vastly improved, with better impact across all health, social and economic domains.

### **The level of awareness amongst employers and workers of the symptoms of menopause and perimenopause, and the awareness, availability and usage of workplace supports;**

Other submissions will have greater expertise in this area.

### **Existing Commonwealth, state and territory government policies, programs, and healthcare initiatives addressing menopause and perimenopause;**

Other submissions will have greater expertise in this area.

### **How other jurisdictions support individuals experiencing menopause and perimenopause from a health and workplace policy perspective; and any other related matter.**

Other submissions will have greater expertise in this area.

# Summary of Recommendations

I wish to make the following recommendations for the Committee to consider:



- **Consider mental ill health as a critical symptom of menopause**

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- **Facilitate research into the hormone treatment of menopausal mental ill health**

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- **Facilitate biological research into menopausal mental health to develop early markers that assist with objective diagnosis**

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- **Facilitate education of health practitioners, especially mental health care practitioners on the hormone cause and treatment of menopausal ill health**

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- **Support holistic menopause mental health and physical health care through new menopause services**

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Yours Sincerely,  
Professor Jayashri KULKARNI AM  
Director HER Centre Australia

# References

- Austen S and Viforj R, O (2010) The employment transitions of mid-life women: health and care effects. *Ageing and Society* 30(2): 207-227.
- Barth C, Villringer A and Sacher J (2015) Sex hormones affect neurotransmitters and shape the adult female brain during hormonal transition periods. *Front Neurosci* 9: 37.
- Bitran D, Sheikh M and McLeod M (1995) Anxiolytic effect of progesterone is mediated by the neurosteroid allopregnanolone at brain GABAA receptors. *Journal of Neuroendocrinology* 7(3): 171-177.
- Blazer D, G, Kessler R, C, McGonagle K, A, et al. (1994) The prevalence and distribution of major depression in a national community sample: the National Comorbidity Survey. *Am J Psychiatry* 151: 979-986.
- Bustamante-Barrientos FA, Méndez-Ruette M, Ortloff A, et al. (2021) The Impact of Estrogen and Estrogen-Like Molecules in Neurogenesis and Neurodegeneration: Beneficial or Harmful? *Frontiers in Cellular Neuroscience* 15.
- Cohen L, S, Soares C, N, Vitonis A, F, et al. (2006) Risk of new onset of depression during the menopausal transition. *Arch Gen Psychiatry* 63: 385-390.
- Dennerstein L, Guthrie J, R, Clark M, et al. (2004) A population-based study of depressed mood in middle-aged, Australian-born women. *Menopause* 11: 563-568.
- Fester L and Rune G, M (2021) Sex neurosteroids: hormones made by the brain for the brain. *Neuroscience Letters* 753: 135849.
- Freeman EW (2015) Depression in the menopause transition: risks in the changing hormone milieu as observed in the general population. *Women's Midlife Health* 1(1).
- Herson M and Kulkarni J (2022) Hormonal Agents for the Treatment of Depression Associated with the Menopause. *Drugs & Aging* 39(8): 607-618.
- Kim DR and Joffe H (2006) Use of Antidepressants during Perimenopause. *Women's Health* 2(4): 627-637.
- Kulkarni, J., Gavrilidis, E., Hudaib, A. R., Bleeker, C., Worsley, R., & Gurvich, C. (2018). Development and validation of a new rating scale for perimenopausal depression—the Meno-D. *Translational psychiatry*, 8(1), 123
- Kulkarni, J., Gavrilidis, E., Thomas, N., Hudaib, A. R., Worsley, R., Thew, C., & Gurvich, C. (2018). Tibolone improves depression in women through the menopause transition: A double-blind randomized controlled trial of adjunctive tibolone. *Journal of affective disorders*, 236, 88-92
- Kulkarni, J. Depression: a major challenge of the menopause transition. *Medicine Today*. 2022; 23(10): 16-22.
- Kulkarni, J. The misunderstood female factor. *Nature Outlook*. 25th August 2022 Vol: 608
- Maki P, M, Kornstein S, G, Joffe H, et al. (2019) Guidelines for the evaluation and treatment of perimenopausal depression: summary and recommendations. *Journal of Women's Health* 28(2): 117-134.
- McEwen B, S and Parsons B (1982) Gonadal steroid action on the brain: neurochemistry and neuropharmacology. *Annual Review of Pharmacology and Toxicology* 22: 555-598.
- National Institute for Health and Care Excellence (2015) Menopause: diagnosis and management. NG23. Available at <https://www.nice.org.uk/guidance/ng23/chapter/recommendations> (accessed December 2023)
- Pimenta F, Leal I, Maroco J, et al. (2012) Menopausal symptoms: do life events predict severity of symptoms in peri- and post-menopause? *Maturitas* 72(4): 324-331.
- Rossouw J, E, Anderson G, L, Prentice R, L, et al. (2002) Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results From the Women's Health Initiative randomized controlled trial. *JAMA* 288(3): 321-333.
- Tangen T and Mykletun A (2008) Depression and anxiety through the climacteric period: an epidemiologic study (HUNT-II). *Journal of Psychosomatic Obstetrics and Gynecology* 29: 125-231.

Depression  
outlook

# The misunderstood female factor

Menopausal depression takes a huge toll, but is underfunded and under-researched, says Jayashri Kulkarni.

**D**epression affects almost 300 million people worldwide, and women are twice as likely to experience it than are men. Notably, the incidence of depression in women peaks in the years around menopause<sup>1</sup>.

Menopause is a long process that generally begins in a person's mid-40s and can continue for more than a decade. Depression caused by menopause can be more severe than that experienced by pre- and post-menopausal women (or by men of any age). Not coincidentally, suicide rates for women also are highest in the 45–64 age group<sup>2</sup>.

Remarkably, these sad and shocking statistics have not created serious concern in society at large.

There are several reasons for the lack of attention. One is that menopausal depression is not universally recognized as a specific condition. There is no entry for it in any of the standard diagnostic manuals. Many women and their health-care workers continue to underestimate just how much menopausal depression impairs the quality of life. A popular myth is that this malady is mild and short-lived. This is not true.

Moreover, inattention to menopausal depression reflects the systemic sexism that pervades biomedical research, which manifests as a lack of funding into research and services for women's health more generally. An analysis<sup>3</sup> published in 2021 concluded that the US National Institutes of Health provides "a disproportionate share of its resources to diseases that affect primarily men, at the expense of those that affect primarily women".

Finally, we can point to the nature of life as experienced by many women in their mid-40s to early 50s – a stage that can also be marked by particular challenges in careers, intimate relationships, raising adolescent children and physical health. However, the statistics that show increased, severe depression in this age group strongly suggest that there is another significant 'tipping point' at work.

There is one obvious biological change for women, as well as some trans men and non-binary people, in this age cohort: the changing levels of hormones in the brain. During menopause, oestrogen levels in particular fluctuate, destabilizing levels of serotonin and dopamine and thus affecting mood. Swings in other hormones, such as progesterone and testosterone, can have similar effects throughout menopause. Unfortunately, people with



**"Too few women are benefiting from scientific advances."**

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menopausal depression often respond inadequately to standard antidepressants.

The good news is that hormone treatments such as oestrogen therapy can be an effective way to treat the condition – either as an adjunct to antidepressants<sup>4</sup> or as a solo first-line treatment<sup>5,6</sup>. Yet there remains considerable reluctance to use them; in many cases, a diagnosis of any form of depression still leads to an automatic prescription of an antidepressant. This practice is particularly inexplicable given that the guidelines from both the North American Menopause Society and the International Menopause Society highlight the safety of hormone therapy in women during and up to 10 years after menopause.

There was a clear starting point for this automatic jump to antidepressants. In the early 2000s, a study<sup>7</sup> by the Women's Health Initiative on hormone replacement therapy (HRT) during menopause received sensational media attention. In 2002, the investigators suddenly stopped the combined (oestrogen and progestogen) HRT arm of the study because of an increased risk of breast cancer, heart disease, stroke and blood clots. The preliminary data were widely reported, and many people and their physicians became alarmed about the safety issues of HRT.

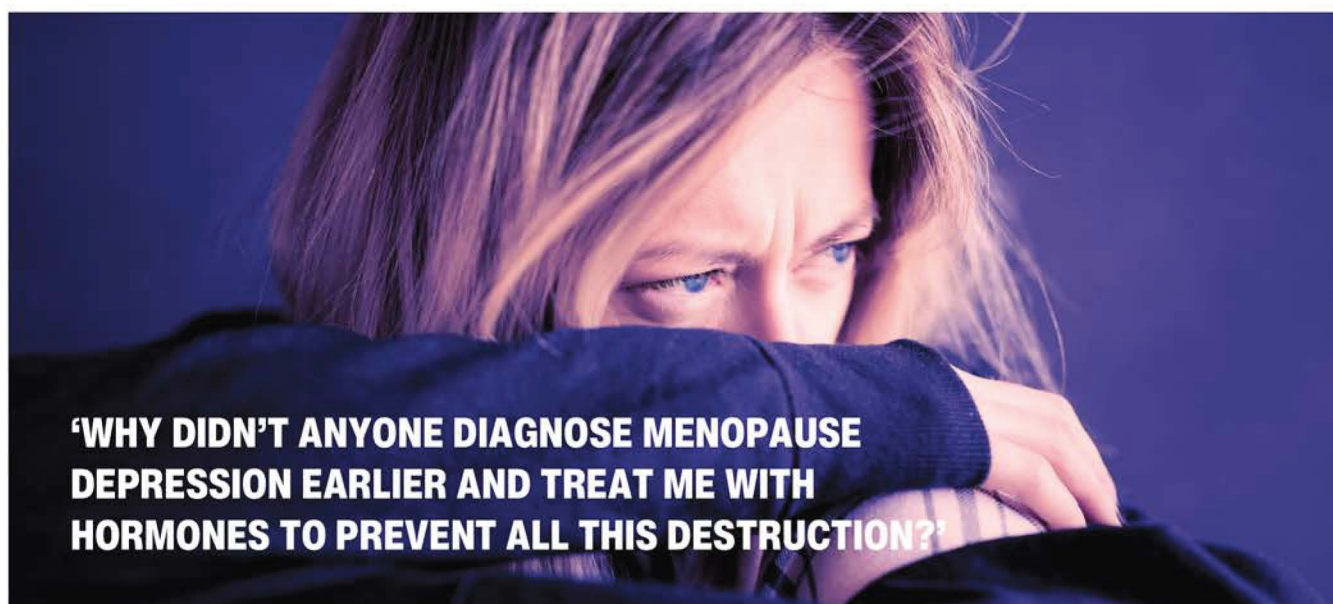
Since then, many of the study's results have been refuted. Furthermore, new menopause hormone medications are being developed, including synthetic selective oestrogen-receptor modulators, which should improve the safety of hormone therapy. But many health-care professionals do not recognize menopause as the underlying causal factor in women with mid-life depression, and so do not prescribe hormone therapy. As a result, too few women are benefiting from such scientific advances.

Improving outcomes for people with menopause-related depression requires some significant changes. Most importantly, psychiatrists and other mental-health practitioners who treat women in their 40s and 50s need to enquire about menopause at the outset of treatment, and be willing to prescribe hormone therapies. In addition, clinicians and health-care students alike need to be better educated about this phase of women's lives. A big part of clinicians' reluctance to prescribe HRT for menopausal depression is the lack of knowledge about menopause – particularly how it affects the brain.

To educate the public as well as health-care workers, we need the term menopausal depression to be recognized as a diagnostic entity. And more funding needs to be directed into women's mental-health care. The treatment of depression in middle-aged women, who are often key senior employees as well as the main carers for both young and older people, needs to be made a higher priority. Providing targeted mental-health care for women who experience menopausal depression ensures a brighter future for all of us.

1. Tangen, T. & Mykletun, A. *J. Psychosom. Obstet. Gynecol.* **29**, 125–131 (2008).
2. Curtin, S. C., Warner, M. & Hedegaard, H. *NCHS Data Brief.* **241**, 1–8 (2016).
3. Mirin, A. A. *J. Womens Health* **30**, 956–963 (2021).
4. Parry, B. L. *Int. J. Womens Health*, **2**, 143–151 (2010).
5. Soares, C. N., Almeida, O. P., Joffe, H. & Cohen, L. S. *Arch. Gen. Psychiatry* **58**, 529–534 (2001).
6. Kulkarni, J. et al. *J. Affect. Disord.* **236**, 88–92 (2018).
7. Rossouw, J. E. et al. *JAMA* **288**, 321–333 (2002).

## The Story of Anne



Anne was a fit, 49-year-old Nurse, with no prior mental health history. Anne was married for 20 years with two sons aged 16 and 14. She was a senior nurse who loved her job and had been working in the same hospital for the past 20 years.

Suddenly, one day at work, she experienced panic attacks – for no obvious reason. Anne had a rapid heart rate, was sweating profusely, shaking all over, hyperventilating and felt like she was going to die. Over the next few weeks, she had intermittent episodes of feeling enraged, being tearful, and was unable to concentrate or remember even simple things. These episodes continued on and off for months. Anne saw her GP, who diagnosed depression and started her on an antidepressant. She had a little relief but was still far from her usual self. She made mistakes at work, and this made her feel so bad that she resigned from the job she loved.

Anne's mental health deteriorated over the next 2 years with increasing anxiety, panic, and depression. Her doctor increased the dose of antidepressant and added in antipsychotic medication. She gained 20kg of weight. At home, she was often very angry with her husband and

sons and there were many fights, often about minor issues. Anne spent a lot of time in bed and stopped socialising. She saw a psychiatrist, who diagnosed psychotic depression and she was treated with more medications. Her husband left her and a custody battle over their sons began.

Anne was referred to the Alfred Women's Mental Health Clinic for a second opinion. We diagnosed menopausal depression and began treatment with hormone therapy – an estrogen patch and oral progesterone.

Over the next 4 months, Anne's mental health improved enormously. By 6 months after starting hormone treatment, Anne had completely recovered. However, her marriage had ended, her sons were struggling in many ways, and she had lost her job plus superannuation.

Anne said, **'WHY DIDN'T ANYONE DIAGNOSE MENOPAUSE DEPRESSION EARLIER AND TREAT ME WITH HORMONES TO PREVENT ALL THIS DESTRUCTION?'**

Anne is typical of many women I see in my Clinic – which is the ONLY mental health & hormone treatment facility in Australia. We must do better.



## HER CENTRE AUSTRALIA

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**Patron:** Her Excellency Professor the Honourable  
Margaret Gardner AC, Governor of Victoria

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HER Centre Australia is dedicated to understanding and treating women's mental health across the lifespan. Our integrated approach combines clinical services, training, and research to transform outcomes and enhance the quality of life for all women facing mental health challenges.

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