



## SWAN Fact Sheet:

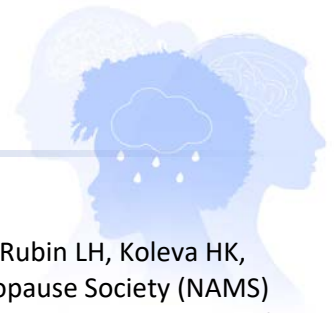
### Depression in Women – From Midlife and Across the Menopause Transition (Perimenopausal Depression)

#### Does the menopausal transition affect a woman's mood?

- It is not uncommon for some women to experience psychological and emotional symptoms, or mood swings during the menopausal transition (MT). These can be caused by many factors.
- Depressive symptoms, such as periodic feelings of sadness, feeling down, tired, and helpless or hopeless are not uncommon and can affect up to a quarter of women even prior to the menopause transition. Studies have shown that the percentage of women experiencing depressive symptoms during the perimenopause is higher, but the exact percentages vary widely across study populations and countries. Far fewer women will experience long lasting and severe depressive symptoms, called major depression (see below).
- The menopausal transition is the time in midlife when women begin to experience changes in the amount, duration, and timing of their menstrual flow, and then begin to skip menstrual periods. Women are more vulnerable to developing depressive symptoms during the transition, especially just before their final menstrual period.
- Changes in female hormones across the MT can contribute to depressive symptoms; symptoms may be worse when estrogen levels vary more widely and progesterone is no longer produced.
- Classic depressive symptoms often occur in combination with, and may be a result of, other menopause symptoms such as hot flashes and night sweats, but they also may be due to sleep disturbance. They may also occur in response to psychosocial challenges like relationship problems, changes in income, or other stressful events. It can be difficult to sort out all the issues that contribute to mood disturbances.
- Some women may experience depressive symptoms for the first time during midlife. For these women, stressful life events, a history of anxiety disorder, and limitations in physical health seem to be more important risk factors for this first episode of depressive symptoms than menopause.
- A clinical diagnosis of depression, also called Major Depressive Disorder (MDD) is a mood disturbance that includes persistent feelings of sadness, feeling down, lack of energy, and loss of interest or pleasure in activities once enjoyed to the point where these symptoms also affect eating, sleeping, and daily activities, lasting for at least 2 weeks.
- Women who have had MDD prior to menopause may be more vulnerable to having depressive symptoms or MDD during the perimenopause and in the early post-menopausal years.

#### What can you do to prevent or alleviate depression during the menopausal transition and post menopause?

- Be aware of depressive symptoms and mounting stressors or other psychological or physical challenges.
- Adopt healthy behaviors and preventive practices (e.g. eat a healthy diet, exercise, get good sleep, practice mindfulness, and meditation therapies, spend time with friends) to reduce stress.
- Tell your healthcare provider about depressive symptoms or find a healthcare professional referral so that they can provide treatment strategies and solutions. Effective non-medication and medication treatments are available.
- There is some evidence that estrogen therapy has an antidepressant effect comparable to traditional antidepressant medications. However, women who haven't had a hysterectomy generally are prescribed hormonal therapy that combines estrogen plus progesterone, and research on the effect of combined HT on depressive symptoms is sparse.



To find out more, please check out:

1. Maki PM, Kornstein SG, Joffe H, Bromberger JT, Freeman EW, Athappilly G, Bobo WV, Rubin LH, Koleva HK, Cohen LS, Soares CN, on behalf of the Board of Trustees for The North American Menopause Society (NAMS) and the Women and Mood Disorders Task Force of the National Network of Depression Centers. Guidelines for the evaluation and treatment of perimenopausal depression: Summary and recommendations. *Journal of Women's Health* 2019;28:117-134.
2. Bromberger JT, Epperson CN. Depression during and after the perimenopause: Impact of hormones, genetics, and environmental determinants of disease. *Obstetrics and Gynecology Clinics of North America* 2018;45(4): 663-678.
3. Freeman EW, Sammel MD, Boorman DW, Zhang R. Longitudinal pattern of depressive symptoms around natural menopause. *JAMA Psychiatry* 2014;71:36-43.
4. Woods NF, Smith-DiJulio K, Percival DB, Tao EY, Mariella A, Mitchell ES. Depressed mood during the menopausal transition and early postmenopause: Observations from the Seattle Midlife Women's Health Study. *Menopause* 2008;15:223-232.
5. Hickey M, Schoenaker DA, Joffe H, Mishra GD. Depressive symptoms across the menopause transition: findings from a large population based cohort study. *Menopause* 2016;23:1287-1293.
6. Freeman EW. Depression in the menopause transition: Risks in the changing hormone milieu as observed in the general population. *Women's Midlife Health* 2015;1:2:1-11.
7. El Khoudary SR, Greendale G, Crawford SL, Avis NE, Brooks MM, Thurston RC, Karvonen-Gutierrez C, Waetjen LE, Matthews K. The menopause transition and women's health at midlife: A progress report from the Study of Women's Health Across the Nation (SWAN). *Menopause* 2019;26:1213-1227.
8. El Khoudary S, Santoro N. SWAN – Scientific Paradigm Shifts. Presented at the MsFLASH Symposium “Taking Charge of Your Magnificent Menopause,” University of California San Diego, San Diego, CA, March 3, 2022.
9. Kravitz HM. Menopause and Mental Health. In Friedman, Howard S. (Editor in Chief). *Encyclopedia of Mental Health*. Second Edition. Volume 3. Waltham, MA, Academic Press, 2016:57-65.
10. Kravitz HM, Colvin AB, Avis NE, Joffe H, Chen Y, Bromberger JT. Risk of high depressive symptoms after the final menstrual period: The Study of Women's Health Across the Nation (SWAN). *Menopause* 2022;29 [in press].
11. Soares CN. Depression. In *Menopause Practice: A Clinician's Guide*, 6th Edition (in Chapter 6, Diseases Common in Midlife Women). Pepper Pike, Ohio, The North American Menopause Society, 2019:138-142.
12. Joffe H, de Wit A, Coborn J, Crawford S, Freeman M, Wiley A, Athappilly G, Kim S, Sullivan KA, Cohen LS, Hall JE. Impact of estradiol variability and progesterone on mood in perimenopausal women with depressive symptoms. *Journal of Clinical Endocrinology and Metabolism* 2020;105(3):e642–e650.
13. Chung H-F, Pandeya N, Dobson AJ, et al. 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* 2018;48(15):2550-2561.
14. Website: American Psychiatric Association. What is Depression? <https://psychiatry.org/patients-families/depression/what-is-depression>

---

\* SWAN recognizes that race is a social construct and that including race/ethnicity in describing our findings is complicated, with there being reasons for and against doing such. We and others are actively reviewing the best approach to ensure that we provide patients with the best information about their health.