

The association between perimenopausal depression and suicidal behaviours

3. Epidemiology and surveillance

Alicia Nevriana¹, *Donghao Lu*¹

¹ Institute of Environmental Medicine, Karolinska Institutet, Sweden

Abstract text

Introduction

Previous cross-sectional studies indicated that perimenopausal depression was associated with suicidal ideation and suicide attempts. However, prospective evidence is lacking and there have been no studies assessing the risk of suicide death.

Objectives

To determine the association between perimenopausal depression and suicidal behaviours (suicide and suicide attempt).

Methods

Population-based matched cohort study using linkage of Swedish national and regional healthcare registers. We included women aged 45-55 and identified the first episode of perimenopausal depression during 2003-2022 recorded in specialist/primary care. Using incidence density sampling, we randomly matched 1:10 by birth year (+/- 1 year) and county of residence. Participants were followed from index (matched) date until death (due to suicide or other causes), emigration, diagnosis of perimenopausal depression (for the unexposed group), or 31 December 2022, whichever was earliest. We estimated hazard ratios (HRs) using Cox regression.

Results

We included 104,758 women with perimenopausal depression (mean age: 49.6 years) and 1,047,580 unexposed women. During a mean follow-up of 10 years (SD: 5.5 years), we observed 742 suicide deaths among women exposed to perimenopausal depression (rate 68.4 per 100,000 person-years) and 947 deaths among unexposed women (rate 9.1 per 100,000 person-years). Compared to unexposed women, women with perimenopausal depression had a higher risk of suicide (HR 7.49, 95% CI 6.75-8.30).

Conclusion

Preliminary findings from this study indicated that perimenopausal depression was associated with a higher risk of suicide. We plan to control for a range of potential confounders and estimate the risk of suicide attempts in the next phase of the study.