

# Sleep disturbances and vasomotor symptoms in European perimenopausal and postmenopausal women

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## INTRODUCTION

→ Sleep disturbances and vasomotor symptoms (VMS) are among the most common and bothersome symptoms in menopausal women.<sup>1,2</sup> These symptoms frequently co-occur but can also occur independently; only around one-third of night-time awakenings are accompanied by an episode of VMS.<sup>3</sup>

Sleep disturbances and VMS can negatively impact a woman's mood and well-being, resulting in reduced quality of life (QoL).<sup>4,5</sup>

This study evaluated the association between sleep disturbances and QoL in European perimenopausal and postmenopausal women with and without VMS.

## METHODS

→ Data were analysed from perimenopausal women and postmenopausal women aged 40–65 years who completed the internet-based National Health & Wellness Survey in the UK, Spain, Italy, Germany, and France in either 2017 or 2020 (the most recent years with available data from sleep-related patient-reported outcome measurements). Women were categorised as perimenopausal if their menstrual bleeding ceased ≤12 months ago or was irregular (in frequency, duration, or flow heaviness); and postmenopausal if their menstrual bleeding ceased >12 months ago. They were then categorised by the presence or absence of VMS (defined as those reporting hot flashes or night sweats in the past 12 months), followed by the presence or absence of sleep conditions. There were five possible self-reported sleep condition categories; firstly, women reported the presence or absence of insomnia. In the absence of insomnia, there were four other possible categories: 1) sleep difficulties; 2) sleep symptoms occurring at least weekly, including difficulty falling asleep, night-time awakenings, and daytime somnolence; 3) other sleep conditions such as narcolepsy and/or sleep apnea; 4) no sleep conditions. Sleep symptoms and sleep difficulties were not mutually exclusive and were the conditions considered to be potentially menopause-related and thus the most relevant for this study. QoL was assessed using the EQ-5D-5L on a scale of 0–1, where higher scores meant better QoL.

## RESULTS



20,220 women were included in total

26.6% from France, 24.1% from Germany, 23.9% from the UK, 14.3% from Italy, and 11.1% from Spain

Prevalence of VMS and sleep conditions, as well as impact on QoL, are shown below. Sleep disturbances considered likely to be menopause-related are emphasized in darker colours

Figure 1. Prevalence of VMS and sleep conditions in perimenopausal women

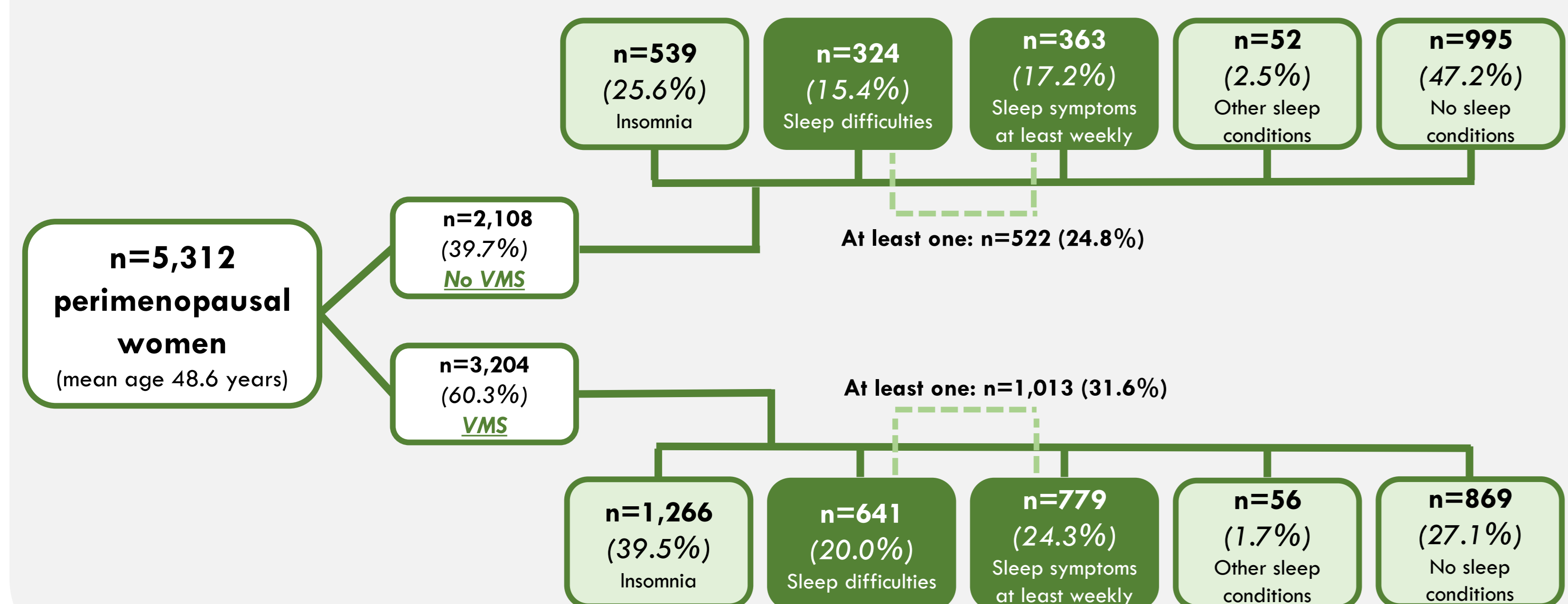


Figure 2. Prevalence of VMS and sleep conditions in postmenopausal women

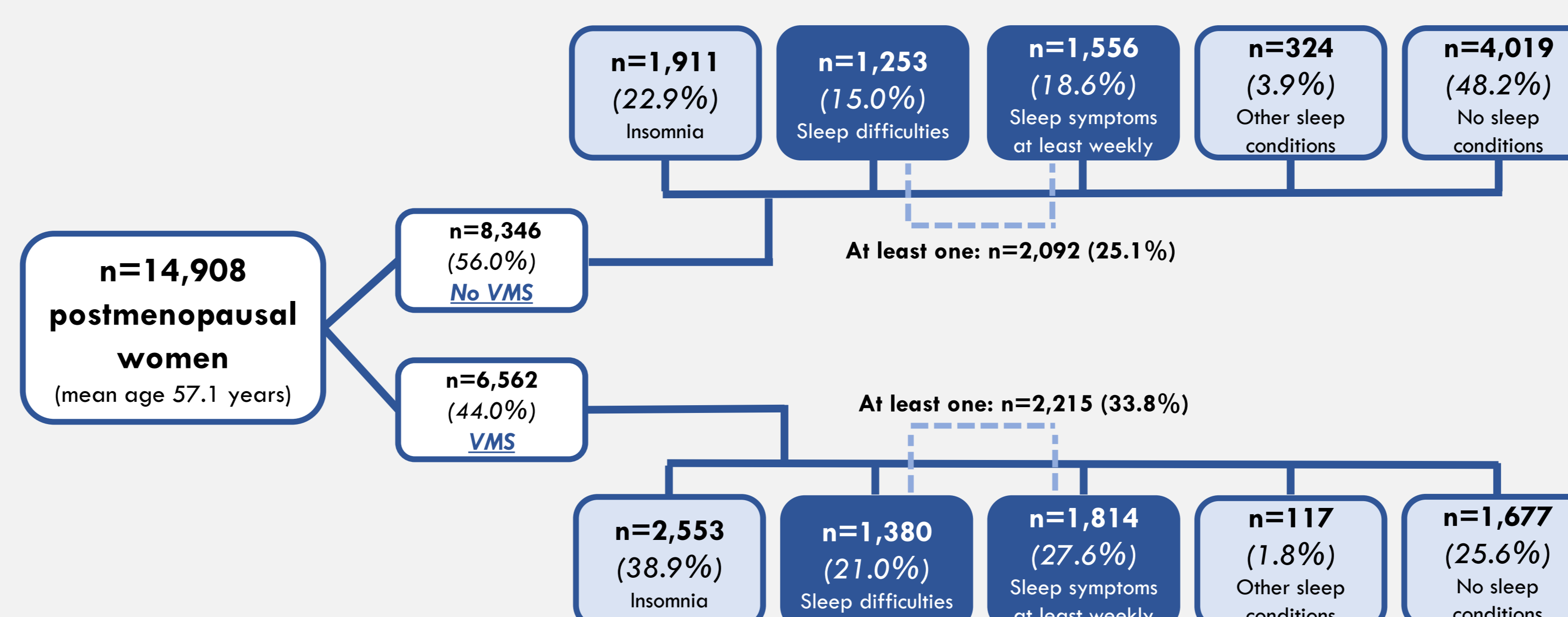
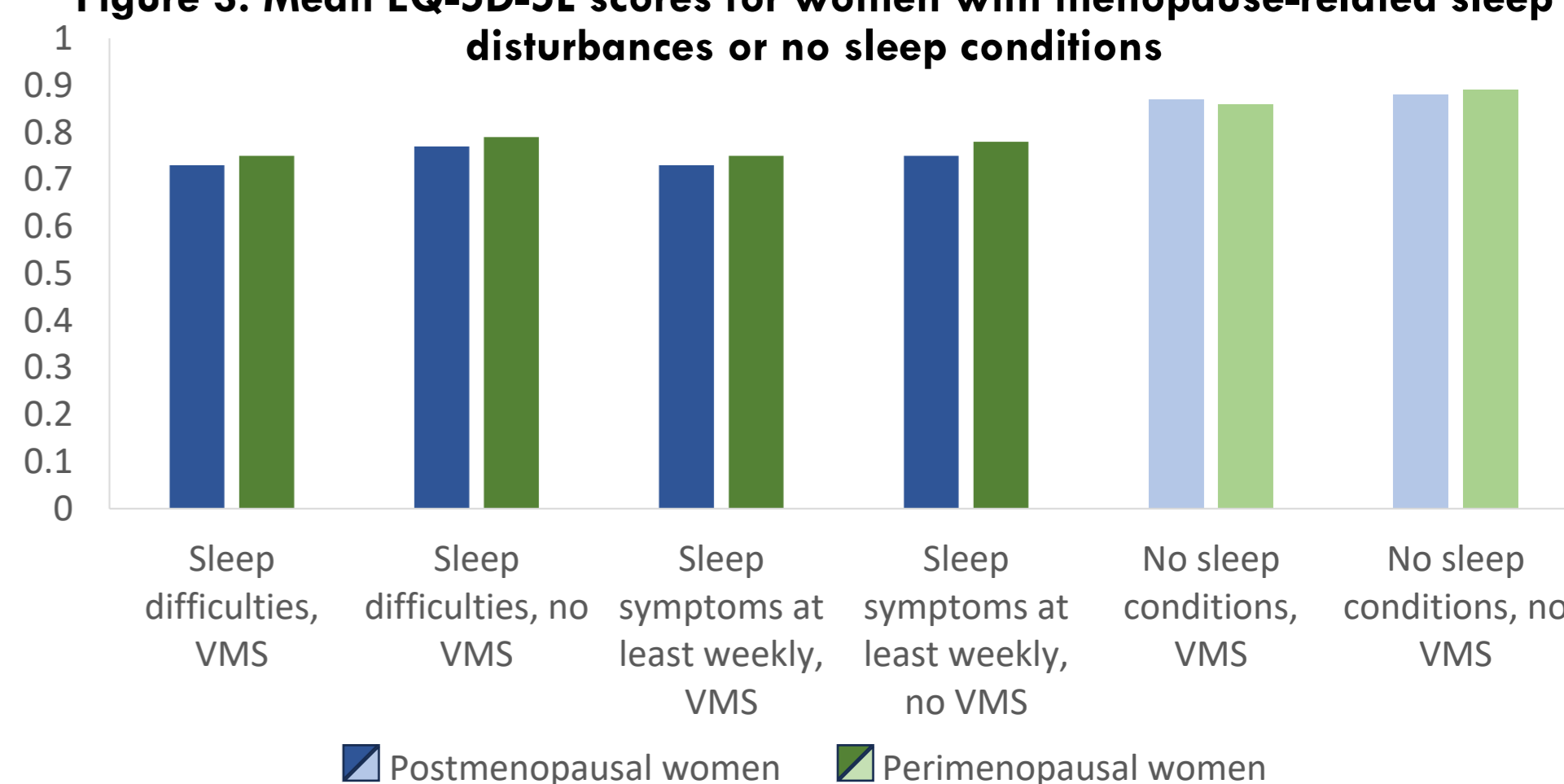


Figure 3. Mean EQ-5D-5L scores for women with menopause-related sleep disturbances or no sleep conditions



→ VMS and sleep conditions were common in both peri- and postmenopausal women (Figures 1 & 2). Women with menopause-related sleep disturbances and/or VMS had lower QoL scores than those without sleep conditions and/or without VMS (Figure 3).

## CONCLUSIONS

The prevalence of sleep conditions, including menopause-related sleep disturbances, was high overall, regardless of the presence or absence of VMS.



Sleep conditions were reported frequently by both perimenopausal and postmenopausal women. They were more common in women with VMS



Menopause-related sleep disturbances were associated with lower QoL scores. VMS were also associated with lower QoL scores



Sleep disturbances should be properly recognised and promptly addressed to mitigate potential negative impacts on women's QoL during the menopause transition

## DISCLOSURES

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