



Comments on: insomnia, postpartum depression and estradiol in women after delivery

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Received: 15 August 2017 / Accepted: 4 January 2018 / Published online: 16 January 2018
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Dear Editor

We read with interest the study by Drozdowicz-Jastrzębska et al., which assessed the relationship between insomnia and both depression symptoms and blood estradiol levels in women during the early postpartum period (Drozdowicz-Jastrzębska et al. 2017). The authors measured several variables and adjusted for them in the models, but two important factors were not well addressed in this study: sleep and Restless legs syndrome (RLS).

The women's sleep disturbances were assessed with Athens Insomnia Scale (AIS), 24–48 h after labor and the authors reported that women who developed postpartum insomnia significantly more often reported insomnia during pregnancy.

Weakened concentration and memory are frequently reported by women during the second or third trimesters of pregnancy, especially among women with antepartum depression. Indeed, cognitive disturbances and sleep disruption are included in the main symptoms of depression (Hampson et al. 2015). Failure of researches using objective sleep assessments to confirm sleep impairment, despite the frequent self-reported sleep problems (Khazaie et al. 2013a), has led some to conclude that sleep questionnaire reveals only negative expectations related to pregnancy, not a true loss of sleep quality (Hampson et al. 2015).

Various features of sleep disruption are associated with risk factors of depression including short sleep duration, long sleep onset latency, discontinuity of nighttime sleep, early morning awakening, wake after sleep onset, and the day-time napping. These aspects of sleep disturbance could

easily assessed by actigraphy which is validated device for sleep-wake pattern assessment during pregnancy (Khazaie et al. 2013b; Tahmasian et al. 2013).

The authors also reported RLS history data from 61 women: 10 women (16.4%) had history of RLS during pregnancy and 51 women (83.6%) had no history of RLS during pregnancy. Four (19.1%) of the twenty one patients who reported postpartum insomnia also reported RLS during their pregnancy.

RLS is considered as a nocturnal urge to move the legs and is attended by uncomfortable feelings deep inside the legs which can lead to delay sleep onset, reduce sleep efficiency and cause multiple awakenings, resulting in significant sleep disruption (Razazian et al. 2015).

The diagnostic criteria for RLS was developed by the International RLS Study Group served as a guideline. Minimum criteria include the presence of four clinical characteristics: 1) Desire to move the limbs, in association with paresthesias and/or dysesthesias; 2) Motor restlessness; 3) symptoms worse or exclusively occurring at rest partially and temporarily relieved by activity; and 4) symptoms worse in the evening or at night (Walters et al. 2003; Dunietz et al. 2017). Similar to sleep, RLS should be assessed by validated scale. However, the authors did not present any scale for assessing RLS and only noted “history of RLS” for the patients.

Lack of corresponding questions about sleep and RLS assessment during pregnancy and in postpartum period as main factors in the study is looking great. However, it would have been insightful had the discussion addressed the impact of the lack of information regarding insomnia/RLS of pregnant women on the observed association of estradiol and depressive symptoms. In conclusion, although this study presented interesting findings on the association of insomnia, depressive symptoms and estradiol in women after delivery, these findings may have been further validated by considering additional data on sleep and RLS assessment of the participating subjects.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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