

Can we ignore a pregnant person's snore?

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Purpose: To conduct a systematic review of OSA (Obstructive Sleep Apnoea) in Pregnancy, to determine common consensus amongst the literature on areas of OSA in pregnancy, to identify gaps within the literature in Obstructive Sleep Apnoea and Pregnancy and consequently to outline research priorities.

Methods: Systematic review of PubMed Database of Pregnancy and Sleep Apnoea over the past 10 years. Abstracts were then reviewed, study types recorded and articles appraised and research summarised.

Results

Over the past 10 years, the number of articles published on Sleep Apnoea in pregnancy has increased and is increasing every year. 414 articles were retrieved when searching for Sleep Apnoea and Pregnancy on PubMed. By title 191 were selected for abstract review and a final 145 were included. This included multiple systematic reviews and meta-analyses. Research in OSA and Pregnancy is diverse, but centres heavily on the use of screening tools such as questionnaires and the relationship between OSA, obesity, hypertensive disorders of pregnancy, gestational diabetes and pre-term delivery.

Figure One: Schematic showing search terms and inclusion and exclusion process of reviewed abstracts

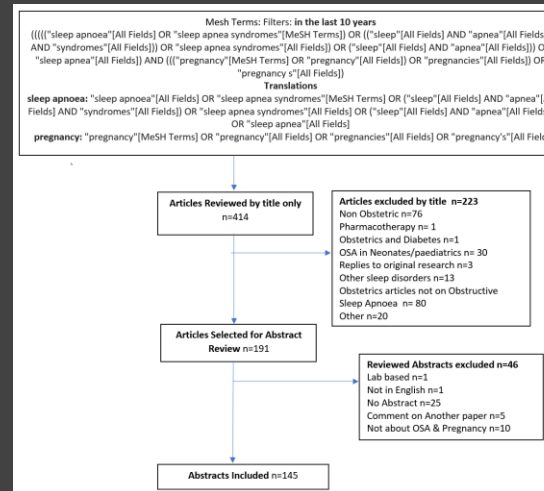
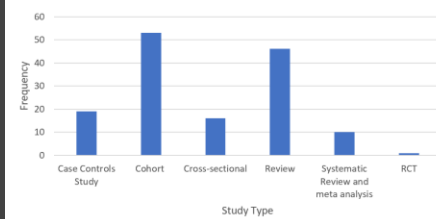


Figure Two: Histograms showing frequency of varying publication types on OSA and pregnancy from 2010 to 2020



Discussion

What we know

- Questionnaires such as ESS, Berlin Questionnaire and STOP Bang have limited utility in detecting OSA in pregnancy.

- Polysomnography is recommended for diagnosis

Where are the research gaps?

- Research is limited into whether treating women with CPAP alters maternal and foetal outcomes, but should be further explored.
- Given the futility of screening without knowing whether outcomes are definitively improved with treatment, research priorities should investigate whether CPAP in the context of OSA in pregnancy improves maternal and foetal outcomes.
- A better understanding of the relationship between GDM, Hypertension, and OSA in pregnancy
- Conflicting evidence exists about the role of OSA in pre-term delivery, preeclampsia and low birth weight
- The relationship between OSA and perinatal mental health.