Results Overall, 174 women were studied at a mean gestational age of 15.3±3.0 weeks (early pregnancy) and home sleep testing was repeated at a mean gestational age of 35.5 ±1.9 weeks (late pregnancy). Sleep duration decreased as pregnancy progressed (6.8hr vs 6.0 hr, p<0.001) while both the AHI and the oxygen desaturation index increased (2.2 vs. 5.4, p<0.001 and 0.5 vs 1.8, p<0.001 respectively). The proportion of women spending some time in the supine sleep position was 36% in early pregnancy, rising to 50% in late pregnancy (p=0.03). of note, 16% of women spent at least half the night supine in early pregnancy and 20% of women did so in late pregnancy.

Discussion Half of women spend some time in the supine sleep position in late pregnancy. Given the emerging associations between supine sleep and stillbirth, maternal sleep practices offer a modifiable risk factor.

41 DEPRESSIVE SYMPTOMS IN PREGNANCY: THE ROLE OF SLEEP TIMING

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Introduction Insufficient and disrupted sleep in pregnancy is significantly associated with antenatal and postnatal depression, which affects up to 20% of perinatal women. Sleep timing is another important sleep variable that represents sleep preferences besides sleep duration, and mid-point of sleep strongly correlates with chronotype and dim light melatonin onset. In the general population delayed sleep mid-point contributes to poor cardiometabolic and psychological function. Emerging data in pregnancy suggest that later sleep mid-point is related to gestational diabetes, gestational hypertension and pre-eclampsia. However, it is currently unknown whether sleep timing plays a role in depressive symptoms in pregnancy.

Methods Pregnant women at least 28 weeks' gestation were recruited from a large academic medical centre and invited to complete surveys about their sleep, including typical bedtimes and wake-times, as well as demographic information. Presence of depressive symptoms was determined by a current diagnosis of depression or a score ≥10 on the Edinburgh Postnatal Depression Scale (EPDS). Sleep mid-point was calculated as halfway between sleep onset and rise time.

Results Overall, 1599 women were included, of which 30% had depressive symptoms. Demographics are shown in table 1. Women with depressive symptoms had similar bedtimes to controls (11:00pm vs. 10:54pm, p<0.17) but longer time in bed (8.9hr vs. 8.6hr, p=0.04). Mid-point was significantly later in women with depressive symptoms compared to controls (03:28hr vs. 03:14hr, p=0.005). In a regression adjusting for sleep duration and BMI, mid-point was significantly associated with depressive symptoms with an adjusted odds of 1.12 (95%CI 1.1-1.2).

Discussion This study provides initial evidence of a link between self-reported late sleep midpoint and depressive symptoms in pregnancy. These findings suggest that sleep timing is important for maternal health and further studies investigating the potential role of chronotype and circadian timing in perinatal depression should be explored.

Abstract 41 Table 1

	Depressive symptoms (n=482)	Controls (n=1117)
Age (years)	29.8±6.0	30.4±5.7
Gestational age (weeks)	33.2±4.4	33.8±4.4
BMI (kg/m^2)	34.0±8.7	31.5±7.2*
Race		
Caucasian	71%	72%
African	18%	14%
Asian	2%	8%
Other	9%	6%
Nulliparous (%)	24%	32%*

*p<0.01

42 FREQUENCY AND SEVERITY OF OBSTRUCTIVE SLEEP APNEA IN BLACK COMPARED TO WHITE PREGNANT WOMEN

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Introduction Black individuals experience a higher prevalence of sleep disruption, including obstructive sleep apnoea (OSA), compared to Whites, which is believed to contribute to a higher incidence of cardiovascular disease. Among pregnant women, Blacks experience a higher burden of poor pregnancy outcomes such as gestational hypertension, pre-eclampsia, gestational diabetes, foetal growth restriction, and premature birth. In pregnancy, OSA has been associated with the latter adverse outcomes. Nonetheless, it is currently unknown whether differences exist in the presence and severity of OSA between Black and White pregnant women

Methods Pregnant women in mid-to-late pregnancy were recruited from a large academic medical centre and invited to undergo home sleep testing using the WatchPAT device. OSA was defined as an apnoea-hypopnoea index (AHI) ≥5 events/hour. The frequency and severity of OSA was compared between Black and White pregnant women.

Results 191 women enrolled (42 Black). Demographic information is shown in table 1. Sleep duration was shorter in Blacks compared to Whites (350 minutes vs 375 minutes,

Abstract 42 Table 1

	Black (n=42)	White (n=149)
Median Age (years)	30 (18-42)	32 (20-45)
Median Gestational Age (weeks)	33 (17-39)	36 (17-39)*
Median Pre-pregnancy BMI (kg/m^2)	34 (17-63)	26 (17-65)*
Pre-pregnancy Obesity (≥30kg/m^2) (%)	71%	31%*
Median BMI at Sleep Study (kg/m^2)	38 (22-64)	30 (21-70)*
Obesity at Sleep Study (≥30kg/m^2) (%)	90%	49%*
Nulliparous (%)	41%	43%*
Hypertensive Disorders of Pregnancy (%)	46%	18%*

*p<0.01

p=0.02). A similar proportion of Black compared to White women had OSA (33% vs. 31%). Although severity of OSA was non-significantly elevated in Blacks (AHI 9.2 vs 6.3, p=0.07), minimum oxygen saturation was significantly lower in Black women (89% vs 91%, p=0.04) and the oxygen desaturation index was higher in Blacks compared to Whites (4.9 vs 2.5, p=0.03) after accounting for differences in demographics.

Discussion The incidence of OSA in pregnancy was high with approximately one-third of all women having OSA. Nonetheless, despite being younger and earlier in gestation, Black women had greater severity of oxygen desaturation compared to Whites; this is likely attributed to the higher BMI observed in Black women. These findings have implications for OSA screening in pregnancy.

43 CHILDHOOD NARCOLEPSY AND AUTISM SPECTRUM DISORDER: A RETROSPECTIVE CASE NOTES REVIEW OF CLINICAL CHARACTERISTICS

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Background Autism spectrum disorder (ASD) is often seen alongside narcolepsy in childhood; however, little is known about the potential link between the two. Our objective was to identify any similarities or differences between children with narcolepsy who also have ASD and those who do not.

Methods A single-centre retrospective records review was undertaken of all children attending narcolepsy clinics as of 1st of August 2021. Data collected included: date and method of narcolepsy diagnosis, severity of narcolepsy at diagnosis, Revised Children's Anxiety and Depressions Scale (RCADS) scores from parent and child, presence of autistic traits, date of ASD diagnosis and support received by the child's family.

Results Data was collected from 83 sets of patient records. of this sample, 75 (90.4%) had a confirmed diagnosis of narcolepsy, further analysis was conducted on this group only. A total of 21 (28.0%) children were recorded to have autistic traits, 9 (12.0%) had a confirmed diagnosis of ASD; 88% of ASD diagnoses were made before investigation for narcolepsy. Children with and without ASD had similar SOL and REMSOP results on MSLT. When collecting RCADS data, 55.6% of questionnaires from children with ASD were incomplete for both parent and child, compared to 29.6% of questionnaires from cases without, there was greater discrepancy between parent and child scores in the ASD group and higher parent-rated anxiety scores. Children with ASD were also more likely to receive enhanced school support.

Discussion Descriptive analysis of this sample has shown that 40% of children with narcolepsy also have and ASD diagnosis or autistic traits. These children were more likely to be rated as anxious by their parents and went on to require enhanced support throughout school. This may suggest that ASD is could act as a clinical indicator to offer enhanced support where possible.

44 EXPLORING PATTERNS OF BEDTIME BEHAVIOUR IN A COHORT OF CHILDREN WITH SEVERE BEHAVIOURAL INSOMNIA

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Introduction A child's activities during the hour before bedtime forms the basis of the assessment for behavioural change interventions for children's insomnia. The aim of this observational study was to identify patterns of behaviour around bedtime in a cohort of children with severe sleep difficulties and to explore deviations in behaviour from The Sleep Charity's standard bedtime routine advice.

Methods Data were collected by research staff using a questionnaire during a baseline face-to-face visit to the child's home prior to sleep practitioner support as part of the Sheffield Children's Sleeping Well study. Children were aged 2-17 years with a diagnosis of ADHD or were identified as a looked-after child. Data was input into NVivo where it was coded to identify common or recurring keywords or phrases in the responses.

Results 51 parents were interviewed. Table 1 presents the coded responses to questions relating to sleep behaviours. For 32 children, bedtime routines lasted 30 mins-2 hours; 17 had no routine. Only 13 children were reported to have actively had technology removed within the hour before bedtime. 32 had no planned snack. of the 17 that did, snacks were usually cereal, toast, biscuit, warm milk although some snacks

Abstract 44 Table 1 Coded responses to questions relating to sleep behaviours

Synthesis of Coding	Number of responses (N=51)*
Where does child sleep?	
In own bed (in own room)	39
In own bed (shared room)	9
In own bed (in parent/caregiver bedroom)	2
Bunk bed (shared with parent)	1
Describe your child's bedroom	
Blackout blinds curtains:	
Yes	39
No	13
Has electronics in bedroom:	
Yes	40
No	7
Used as playroom:	
Yes	30
No	18
Does your routine involve a wash or bath?	
Bath (finds relaxing)	5
Bath (finds stimulating)	17
Shower	5
Yes (reluctant)	13
Yes (whether a bath or shower depends on mood)	2
No	2
Sleep related fears	
Scared of dark	8
Previously had fears, does not at present	1
Anxiety re school	1
Bad dreams	11
Fear of something present in bedroom	8
Feels unwell at bedtime	1
Inability to relax	3
No fears	20

*Participants responses, in most cases, had multiple codes applied to them so *N* is not consistent with the response numbers. Further, some participants did not answer all questions.