

in hospital study, whereas in our study snoring was subjectively assessed and perhaps better represents the usual situation at home. Furthermore, the femoral artery may not be an appropriate 'control' artery with which to compare the carotid for atheroma.

**Abstract P200 Table 1 Degree of carotid artery stenosis in 'frequent' and 'non-frequent' snorers**

	'Frequent snorers'	'Non-frequent' snorers	p-Value
Carotid stenosis $\geq$ 30%	43%	48%	0.44
Carotid stenosis $\geq$ 50%	16%	21%	0.42

'Frequent snoring' = snoring stated as  $\geq$  1–2/times per week.  
p-Values all determined by Fisher's Exact test.

**REFERENCES**

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**P201 HEALTH LITERACY AND SLEEP APNOEA**

doi:10.1136/thx.2010.151068.2

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**Introduction** We have previously demonstrated that 33% of new patients and 16% of serial users have difficulty completing the Epworth Sleepiness Scale (ESS). To explore reasons for this we assessed literacy in a further group of patients.

**Methods** 122 Sleep Centre and Lung Function laboratory patients were approached and assessed for level of functional literacy in medicine using the REALM questionnaire. A score  $\leq$ 60 suggests a literacy level that would struggle with patient education materials and prescription labels. Education and English language data were collected.

**Results** 86/92 (93.3%) Sleep and 30/30 (100%) Lung function (LF) patients completed REALM. 5 (5.6%) in the Sleep group declined when shown the test. One did not complete due to time restrictions. Mean age was 51.2  $\pm$  11.8 years Sleep and 56.1  $\pm$  17 years LF. Mean age leaving formal education was 18.7  $\pm$  2.9 years Sleep and 17.7  $\pm$  2.9 years LF. In the Sleep cohort 24% (21/86) had a graduate and 15% (13/86) postgraduate education vs. LF 27% (8/30) graduate and 3% (1/30) postgraduate education. REALM scores are shown in Abstract P201 Table 1 grouped into the standard four ranges. 78% (Sleep) and 83% (LF) spoke English as their mother tongue; all patients used English as their everyday spoken language.

**Abstract P201 table 1**

REALM score ranges	Equivalent reading age US school grade	UK age equivalent	% Sleep (n=86)	% Lung function (n=30)
0–18	3rd grade or below	8 years or less	0	0.0
19–44*	4th/6th grade	9–12 years	1.2	3.3
45–60*	7th/8th grade	12–14 years	15.1	6.7
61–66	High School	14–15 years+	83.7	90.0

\*A score  $\leq$  60 suggests a literacy level that would struggle to cope with patient education materials and prescription labels.

**Conclusions** Assessing literacy in patients is not easy. We have previously shown how patients struggle to complete the ESS. Problems completing forms occur for many reasons and evidence suggests that clinicians overestimate patient literacy. We found evidence of impaired health literacy in 16.3% of Sleep and 10% of Lung function patients. That some Sleep patients declined to be tested once shown the questionnaire might suggest the 16.3% score

is underestimated. Why Sleep patients should fare worse than LF patients is unclear especially when university and age leaving education were higher in the sleep cohort. All used English as their everyday language however fewer Sleep patients had English as their mother tongue. Cognitive deficits associated with undiagnosed obstructive sleep apnoea syndrome and increased sleepiness could conceivably be a contributory factor. This study suggests clinicians need to provide clinical material and information in a format that is comprehensible to a wide range of patients (such as pictorial format) and that Sleep patients may have special needs.

**P202 CLINICS FOR OBSTRUCTIVE SLEEP APNOEA HYPOPNOEA (OSAH)—TIME FOR A CHANGE?**

doi:10.1136/thx.2010.151068.3

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**Introduction** OSAH is a significant public health problem. Growing awareness and rising prevalence is increasing demand for sleep services. Many Trusts are unable to expand existing clinic space to meet this demand. In its recent White Paper<sup>1</sup>, the Government laid out its vision of a patient-centred NHS, pledging patients more choice and control over decision making about their care. However, a sizeable proportion of patients with suspected OSAH are from the working population, yet the NHS does not routinely provide clinics outside normal working hours.

**Method** Patients referred for suspected OSAH were randomly appointed to either daytime or evening clinics. Over a 3-month period, opinions of this out-of-hours service and problems encountered on attending the clinics were surveyed by questionnaire completed by patients in the waiting room.

**Results** Of 165 patients appointed, 156 attended and 136 (87%) completed questionnaires (mean age 50.4 years (range 18–75), 74% male). Over half (57% [77/136]) were in employment of which 21% (16/77) worked shifts and 79% (61/77) days. The rest (59/136 (43%)) were non-working due to disability (42% (24/59)), retirement (39% [23/59]), were full-time carers (10% [6/59]) or were unemployed (8% [5/59]). Patient responses are detailed in Abstract P202 Table 1. In addition, 41% (13/32) of workers seen in evening clinics felt that work would have been a problem if attending in the day. DNA rates were higher for daytime clinics (7%) than evenings (3%). The proportion of workers in the DNAs was unknown.

**Abstract P202 Table 1 Patient responses**

	Working patients	Non-working patients
<b>Actual attendance</b>		
Daytime clinics	58% (45/77)	66% (39/59)
Evening clinics	42% (32/77)	34% (20/59)
<b>Preference</b>		
Daytime clinics	23% (18/77)*	53% (31/59)
Evening clinics	55% (42/77)	12% (7/59)
No preference	22% (17/77)	36% (21/59)
<b>Problems encountered-daytime clinics</b>		
Work	62% (28/45)	—
Transport	9% (4/45)	13% (5/39)
Car parking	9% (4/45)	46% (18/39)
Partner availability	4% (2/45)	13% (5/39)
<b>Problems encountered-evening clinics</b>		
Work	3% (1/32)	—
Transport	0% (0/32)	15% (3/20)
Car parking	22% (7/32)	30% (6/20)
Partner availability	3% (1/32)	0% (0/20)

\*Included 33% working shifts.