

# European Respiratory Society Annual Congress 2012

**Abstract Number:** 1405

**Publication Number:** 1662

**Abstract Group:** 9.1. Respiratory Function Technologists/Scientists

**Keyword 1:** Quality of life **Keyword 2:** Sleep studies **Keyword 3:** Physiological diagnostic services

**Title:** Sleep-breathing disorders (SBD) – Sleepiness, fatigue, quality of life (QoL) and depression

Dr. Adrian H. 8139 Kendrick [adrian.kendrick@UHBristol.nhs.uk](mailto:adrian.kendrick@UHBristol.nhs.uk)<sup>1</sup> and Ms. Sara 8140 Neale [sara.neale@UHBristol.nhs.uk](mailto:sara.neale@UHBristol.nhs.uk)<sup>1</sup>. <sup>1</sup> Department of Respiratory Medicine, University Hospitals, Bristol, United Kingdom, BS2 8HW .

**Body:** Patients with SBD may present with sleepiness, fatigue, and often cannot separate them. SBD affects QoL and depression may occur. Aim: To determine sleepiness, fatigue, depression and QoL in relation to the severity of SBD. Methods: 150 consecutively referred patients had 2 nights of home oximetry (Minolta 300i). Oximetry data was analysed by experienced Physiologists (Download 2001, Stowood Scientific,UK). Patients completed Epworth Sleepiness Score (ESS), SF-36, Multidimensional Fatigue Inventory (MFI-20) and Beck-II score. Data were stratified using 4% and 3% dips/hr, cumulative %time at SpO<sub>2</sub><90% (CT<sub>90</sub>), Δindex and pulse rate change > 6 bpm (PR<sub>6</sub>) from oximetry. Data are given as median(range). Results: 130 patients had usable data, 91M, aged 50yrs (19-79). MFI-20 Reduced Motivation correlated (p<0.05) with 4% (r=0.19), 3% (r=0.22), Δindex (r=0.18) and CT<sub>90</sub> (r=0.17), whilst SF-36 General Health correlated with 3% (r=-0.17) and CT<sub>90</sub> (r=-0.21). No other correlations occurred.

Percent patients related to 4% Dips/hr

	0-5	5-15	>15
ESS	23	33	25
MFI-20			
General Fatigue	55	64	34
Physical Fatigue	36	49	53
Reduced Activity	28	53	31
Reduced Motivation	13	33	19
Mental Fatigue	30	38	22
SF-36			
General Health	47	71	66
Vitality	74	82	60
Mental Health	23	42	25

Similar results were observed for 3% dips/hr,  $\Delta\text{index} > 0.6$  and  $\text{CT}_{90}$ . BECK-II (n=72) had a distribution of 45%, 52% and 33% in relation 4% dips/hr. Conclusions: We observed high levels of fatigue and sleepiness and poor QoL. Patients with mild SBD had high levels of fatigue, depression and sleepiness, whereas patients with moderate SBD had a lower percentage of patients. It is essential to account for fatigue and QoL and to investigate negative studies further.