

diagnosis of obesity in 2005–2006 and 2009–2010 are 7.14% and 15.63%, respectively. The admission rates with obesity have increased significantly in 2009–2010 compared to 2005–2006 with an OR of 2.52 (1.14 to 5.08) with a p-value of 0.021. Average length of stay in 2005–2006 is 20.6 days and in 2009–2010 19.9 days respectively. Average length of stay in non-obese patient during the same period is 8.9 days. There are a higher proportion of obese women as compared to men admitted to NIV unit in 2009–2010. Abstract P152 Table 1.

Abstract P152 Table 1

	April 2005 to March 2006	April 2009 to March 2010
Total admissions	154	160
Obese patients	11	25
Length of stay	20.6 days	19.9 days
Average weight	121.33 kg	114.34 kg
Average BMI	42.11	43.03

Conclusion There is a significant increase in number of admissions who are obese to the NIV unit. This is consistent with the observation that there is an increase in the BMI of acute general admissions. These cohorts of obese patients have a higher average length of stay and consume enormous amount of healthcare resources. Interventions to reduce obesity in the general public need to be taken up as a priority to preserve limited healthcare resources.

P153 THE EFFECT OF BODY MASS INDEX ON OUTCOMES OF ACUTE NON-INVASIVE VENTILATION (NIV) IN A DISTRICT GENERAL HOSPITAL

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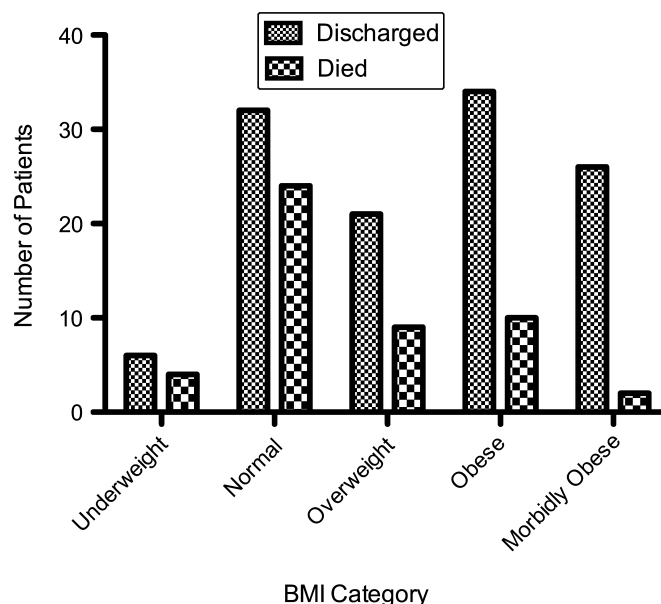
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Introduction The increasing prevalence of obesity is likely to affect the caseload of Non-invasive Ventilation (NIV) units. We hypothesised that outcomes in the obese and morbidly obese population would differ from patients with a normal Body Mass Index (BMI) on the NIV unit.

Method We audited all patients admitted to the NIV unit from January 2007 to December 2009. Patient demographics, admitting diagnosis, baseline arterial blood gases (ABG), duration on NIV, length of stay and outcome were recorded on BTS NIV audit proformas. BMI was obtained from GP records. Data were analysed using Prism 5.

Results A total of 176 patients (46% male, median age 74), were managed on the NIV unit. The admitting diagnosis was COPD (59%), Obesity hypoventilation syndrome (OHS) (13%), Cardiac failure (13%), Neuromuscular disorders (2%) or "other" diagnoses (13%). The median BMI was 27 (IQR 22.7–35.0); 6% of patients were underweight, 33% normal weight, 18% overweight, 26% obese and 17% morbidly obese. An increasing proportion of females were found in the obese and morbidly obese population (χ^2 $p=0.003$). No statistical differences were found in baseline ABG and NIV duration between different BMI categories. Compared to patients with a normal weight, obese and morbidly obese individuals had significantly longer lengths of hospital stay (Mann–Whitney U test $p=0.004$ and $p=0.001$, respectively). Outcomes did not differ between normal weight, underweight, or overweight patients. However, obese and morbidly obese patients were significantly more likely to survive admission compared to patients with a normal BMI (Abstract P153 Figure 1; χ^2 $p=0.035$ and $p=0.0008$, respectively).

Outcome of Patients Admitted to Acute NIV Unit



Abstract P153 Figure 1 Outcome of patients admitted to NIV Unit.

Similarly, there was no significant difference in age, gender, ABC parameters, NIV duration or length of stay between COPD and OHS patients. However, OHS patients were significantly more likely to survive admission (χ^2 $p=0.0042$).

Conclusion The outcomes for obese and morbidly obese patients were significantly better than patients with a normal BMI, although the length of stay was higher. Despite similar demographic features and metabolic disturbance of COPD and OHS patients, OHS patients were more likely to survive admission.

P154 THE PATIENTS' EXPERIENCE OF NIV. A PHENOMENOLOGICAL STUDY

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Background The Evidence that NIV is an effective treatment for patients with COPD who present in Acute Type 2 Respiratory Failure is well documented. Yet despite NIV being considered the gold standard for treating patients with this life threatening condition, no published research could be found on how individuals experienced NIV in the acute setting. The Respiratory Team has led the NIV service for the last 7 years and our knowledge has grown with every patient we have treated with NIV. However during the follow-up of patients who had undergone NIV it became apparent that some of them had strange tales to tell. They told of dreams and images that they associated with their episode on NIV. Some refused having NIV again due to their dislike of the treatment. This was not something which had been discussed whilst in hospital and warranted investigation.

The Study This phenomenological study aimed to explore the experiences of 8 patients with COPD who underwent NIV for Acute Type 2 RE. To gain access to the rich data, in-depth unstructured interviews were conducted. The data were analysed using a framework by Deikelman.

The Outcomes Some themes which emerged from the data were expected however, the main theme of delirium was not. This unpredicted finding raised issues about mental capacity and decision making. This new understanding of delirium and its possible