Obesity and the respiratory physician

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Respiratory medicine has developed as a specialty in the wake of a number of public health milestones. The origins of many of the learned societies associated with respiratory medicine can be traced back to the epidemic of tuberculosis (TB) in the early 19th century.1 Effective public health and effective treatment regimes reduced the prevalence and mortality of TB. The seminal work linking the role of tobacco smoking and its detrimental effects on the lung2 was the second key finding which challenged our specialty. Public health measures and the development of new treatments are reducing the prevalence of smoking-related lung disease, although there is still much work to be done. Obesity has emerged in the opening years of this century as a major challenge to public health. The impact of obesity on the prevalence and mortality of many diseases is well documented, although there has been little attention paid to its impact on respiratory disease. Obesity rates are rising at an alarming rate in developed and developing countries, in both sexes, in children and adults. The obesity epidemic in children is particularly alarming. Obesity has emerged in the early decades of the 21st century as a global health issue of major public health significance. Obesity is the one condition, resulting in impaired quality of life and high healthcare utilisation.

Patients in the intensive care unit who are obese have specific and practical issues which affect this group of patients—including the difficulties in transport and imaging. These will include such measures as provision of routes to allow commuters to walk or cycle, regulation of advertising of junk food, access for increased physical activity, re-education of consumers regarding food choices and incentives for farmers to produce nutritious food.7

However, more important will be the urgent implementation of far-reaching public health measures designed to reduce the impact of obesity on future generations. These will include such measures as provision of routes to allow commuters to walk or cycle, regulation of advertising of junk food, access for increased physical activity, re-education of consumers regarding food choices and incentives for farmers to produce nutritious food.7

The combined advertising spending for Pepsi and Coca-Cola for 2004 was more than $6 billion.8

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than the entire budget of the World Health Organization for 2002–3. While discrepancies such as this remain, it seems that obesity will continue to be an important issue for years to come. As respiratory physicians we need to recognise and treat obesity in our current patients and to campaign vigorously for measures to improve and preserve the respiratory health of future generations.

Competing interests: None.

REFERENCES


Nasal CPAP or intubation at birth for preterm infants

Bronchopulmonary dysplasia, resulting from damage to the lungs caused by ventilation, remains a major cause of mortality in preterm infants. In this international multicentre study the investigators compared continuous positive airway pressure (CPAP) with intubation in preterm infants (infants born at 25–28 weeks’ gestation) to assess whether avoidance of ventilation reduced the incidence of bronchopulmonary dysplasia.

A total of 610 infants were randomised to receive nasal CPAP or intubation and ventilation if, 5 min after birth, the clinician leading the resuscitation decided continuing respiratory support was necessary. The demographic characteristics of the two groups were similar. Nasal CPAP was started at 8 cm H2O and adjusted as needed. The primary outcome of the study was death or bronchopulmonary dysplasia (defined as the need for oxygen treatment at 36 weeks’ gestational age). Secondary outcomes included the use of oxygen treatment at 28 days and the incidence of intubation.

The results were reviewed at 28 days, 36 weeks and before discharge, and showed a minimal difference in overall mortality between the two groups. Although the CPAP group had fewer days of ventilation, required a lower rate of oxygen treatment at 28 days and the use of surfactant was reduced, they had a higher risk of pneumothorax.

This study did not identify CPAP as a significant agent to reduce death or rates of bronchopulmonary dysplasia compared with intubation. The authors point out that it also does not help to identify infants at birth who, if treated with CPAP, will subsequently require intubation and ventilation. However, CPAP does not appear to affect infants adversely, even if they are subsequently ventilated.


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