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Congestion charging and the walking classes

New charge tackles road danger at its source

Two hundred years ago London was a cesspit. Its streets were awash with sewage and infectious disease was a deadly scourge of the urban poor. The man credited for cleaning up the mess was a tenacious London politician called Edwin Chadwick.[1] His 1842 report *Survey into the Sanitary Conditions of the Labouring Classes* was a landmark in public health with its graphic descriptions of how filthy living conditions were a key factor in the spread of infectious disease.[2] Chadwick battled hard for sanitary reform, waging political war against those opposed to central government intervention in public health matters. His opponents argued that people were clever enough to manage their own affairs, claiming there was "insanity in sanity."[1] But Chadwick won through and is now acclaimed as the instigator of the most important public health reform of the 19th century.

The sewage has long gone, but now the streets of London are in gridlock and traffic is the deadly scourge. Each year in inner London there are some 4000 pedestrian and 2000 cycle casualties, air pollution is a serious health threat, and much of inner London is a noisy dirty mess.[3] Next week, in an effort to clean it up, the mayor of London, Ken Livingstone, introduces congestion charging. Between 7 00 am and 6 30 pm every Monday to Friday, cars and trucks will pay a £5 daily charge for driving into central London. The system will be enforced by hundreds of closed circuit cameras that will check the licence numbers of cars entering the zone against a database of drivers who have paid the fee.[4] The scheme is based on the simple economic premise that if people have to pay more for car travel they will buy less of it. Schemes in Singapore and Norway have resulted in substantial reduction in traffic.[5] Less car travel will result in fewer crashes, reduced emissions, and may encourage drivers to use healthier transportation options such as walking and cycling.[5] If the revenues from charges and fines are ploughed back into other healthy transport initiatives then the scene is set for a major advance in public health.

In 1897, when Stephen Kempton was crushed to death by a motor taxi in Hackney, becoming the first child to die on Britain's roads, it would probably have been his only experience of car travel. One hundred years later it is still the poor who face the greatest risk on the roads. Children from families without a car, because they walk more than children from car owning families, have substantially higher pedestrian death rates. Gradients in car ownership explain why a bus driver's child is five times more likely to die on the roadshan a barrister's child.[6] With increasing traffic volume, walking has become more hazardous, leading to a vicious cycle of more car use leading to increased road danger leading to more car use. In the past 10 years, the proportion of children being driven to school has increased from 16% to 30% and school travel is now a major contributor to morning congestion.[7] More parents would drive their children to school if they could. A survey of parents in two inner London primary schools found that 85% were worried about traffic danger on the journey to school.[8] Poverty, not choice, keeps the walking classes off the roads.

The government's strategy to tackle congestion is to encourage more walking to school through the introduction of school travel plans. A school travel plan puts forward a package of measures to improve safety and reduce car use backed by a partnership involving the school, the local authority, the police, and the health authority. To promote the production and implementation of school travel plans the government has funded 111 travel coordinators. A randomised controlled trial conducted in two inner London boroughs found that schools with travel coordinators were more likely to produce a travel plan but there was no evidence that these changed travel patterns or reduce parental fears.[8]

While the government has been tinkering around the edges of the problem, Ken Livingstone with congestion charging has offered a more radical solution. Congestion charging tackles road danger at its source and is a refreshing change from the usual efforts to influence the behaviour of the potential victims of road traffic crashes. The scheme will no doubt meet with fierce opposition from the usual line up of vested interests but if it reduces deaths and injuries of pedestrians and cyclists, encourages walking, and reduces car use, then it will be a major public health reform, and Ken Livingstone will be to the walking classes what Edwin Chadwick was to the working classes.

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New guidelines on the management of asthma

Need to be widely disseminated to improve care of people with asthma

Previous guidelines for the management of asthma produced by the British Thoracic Society and others have been disseminated widely and have been influential on the approach to asthma management in the United Kingdom and internationally. The latest full version was produced in 1993,[1] with a review and position statement in 1995.[2] The coordinating committee at that time predicted that the next revision would be a rewrite in 1997-8, so a new version is overdue. When we reviewed the 1993 guidelines we pointed out a lack of clarity on the evidence base and the need for expert opinion where evidence is lacking.[3] Both of these areas are addressed in the new guidelines[4] through the methods and format familiar from the Scottish Intercollegiate Guidelines Network (www.sign.ac.uk). The new British guidelines have been produced jointly by the British Thoracic Society and Scottish Intercollegiate Guidelines Network, in collaboration with various other bodies.

The levels of evidence and grades of recommendations are given a clear hierarchy, but the method of the Scottish Intercollegiate Guidelines Network also identifies "recommended best practice based on the clinical experience of the guideline development group." Although this might seem a reversion to earlier consensus or opinion based guidelines, it is very useful where necessary evidence is found to be lacking despite an extensive literature search. This if often the case in areas where clinicians need most help. Where there is evidence it is clearly set out, although the writers sometimes add their own view—for example, in the suggestion that senior medical staff should be consulted before the use of intravenous magnesium, although it carries an A recommendation and 1++ evidence.

In the initial chapters on diagnosis, natural history, and non-pharmacological management only one of the recommendations achieves the top A grade, reflecting the need for further research in these areas. Graded A is the recommendation that breast feeding should be encouraged and its benefits include a protective effect in relation to wheezing in early life. Interestingly, in the chapter of pregnancy later in the document, encouraging women with asthma to breast feed gets only a C weighting. This reflects the care needed in the interpretation of evidence and wording of recommendations, and the influence of entry criteria and end points in the studies evaluated. Even if breast feeding reduces virus induced wheeze in the early years, a study[5] subsequent to the work on the guidelines has confirmed that breastfeeding does not protect against asthma in later childhood[6] or adulthood, and may increase the risk. Evidence and recommendations that seem robust now will be challenged, and the large reference base in these guidelines is an excellent resource for readers who want to evaluate the strength of the evidence for themselves.

In the sections on pharmacological treatment and management the evidence and recommendations are divided into age groups—younger than 5, 5-12, and older than 12 years—and grade A recommendations appear much more widely. The steps in the management of chronic asthma in adults and children, familiar from previous guidelines, have a welcome simplification in much clearer charts. The major change is in the approach to step 3, where the guidelines have caught up with current practice of using a long acting bronchodilator as the first approach when low dose inhaled steroids are inadequate. The previous alternative of an increase in the inhaled steroid dose to the 800-2000 µg range has been moved up to step 4.

In the management of acute asthma continued emphasis lies on appropriate initial assessment and adequate immediate treatment. The dose of oral steroid in adults is standardised to 40-50 mg prednisolone daily and the dose of intravenous hydrocortisone reduced from 200 mg to 100 mg six hourly. The profile of nebulised ipratropium in acute exacerbations in adults has been elevated slightly compared with previous guidelines.

The acute management chart in adults for emergency departments has gone down from four to three categories bringing together moderate (peak flow 50-75%) and severe (peak flow 33-50%) into one main group for treatment recommendations, and the chart has acquired a very useful time expectation for the steps in the assessment and treatment.

The guidelines are written clearly, the summary charts are improved, the references are extensive, and useful additional chapters are included on topics such as pregnancy, occupational asthma, concordance or compliance, and audit datasets. However, the impact of the guideline will depend on the enthusiasm with which it is disseminated and taken up. This has been relatively successful in the past, but more will need to be done to reach all relevant doctors, nurses, and patients and to encourage active audit and evaluation. The document sets out a plan for this activity, which will need to be implemented vigorously to make the most of the extensive work that has gone in to the new guidelines.

Discontinuity between primary care, emergency deprtments, and even within secondary units hinders

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