

discussion I asked the question, 'Why can't we give out fruit in schools like we used to give out milk?'. The scheme was launched in the West Midlands and subsequently rolled out across the whole country. What was surprising was the way that we got reports of better attention and behaviour by children as well as more consumption of fruit and vegetables outside school, something that is less surprising now that we have seen similar effects from Jamie Oliver's school dinner's campaign.

Changes in our diet and activity have been monitored and commented on for more than a decade and we have not done enough to create change in the right direction. As a result we will now have to plan NHS services to deal with increasing numbers of people developing diabetes, cirrhosis and other diet- and lifestyle-related diseases. Doing this in a cost-effective way and producing services that are welcomed by patients will be a challenge and at the same time we must continue to work across society to change the underlying causes. The next 25 years will probably be just as interesting as the last.

## References

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## CURRENT KEY DEVELOPMENTS

### Public health issues with counterfeit medicines

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Clinicians who prescribe medicines in the UK at primary care and at hospital level are facing the possibly disastrous consequences of a global crime wave – the supply and distribution of counterfeit medicines and healthcare products. Indeed such counterfeiting could result in a threat to public health similar to that posed by illicit controlled drugs. In the developing world, it has become responsible for fatalities. In China during 2005 more than a dozen infants died after their mothers unknowingly fed them fake milk powder that had little or no nutritional value. How can prescribing doctors recognise and try to ameliorate this threat in their clinical practice?

The World Health Organization (WHO) has grouped counterfeit drugs into seven distinct categories:

- fake packaging, correct quantity of correct ingredients
- false packaging, wrong ingredients
- genuine packaging, no active ingredient
- genuine packaging, incorrect quantity of correct ingredients.

WHO calculates that China's State Drugs Administration has closed 1,300 illegal factories and investigated cases of counterfeiting medicines worth \$57 million in 2003 alone.

Although the problem was believed to be restricted to the developing world, there is increasingly robust evidence that the manufacturers and distributors responsible for the sale and supply of a wide range of counterfeit medications are now active in the developed world, particularly in the UK. Although WHO estimates that counterfeit drugs represent around 1% of pharmaceutical sales in industrialised countries and nearer 10% in the developing world, counterfeiters are increasingly turning their attention to industrialised countries.<sup>1</sup>

The European Commission now estimate that counterfeiting in general represents around 5–7% of world trade and as much as 15% of the global medicines supply chain could, at any time, be counterfeit. WHO estimate that substandard and ineffective medicines have contributed to the emergence in developing countries of drug-resistant strains of cholera, salmonella, tuberculosis and other diseases.<sup>2</sup> In line with this estimate more than 1,000 admissions to hospital in Russia in 2005 were the result of counterfeit insulin.

Although illegal internet trading is a key part of the story of counterfeit supply and unquestionably this has contributed hugely to the explosion of counterfeit medicines in recent years, in Europe and especially the UK counterfeit medicinal products

are increasingly entering the legitimate medicines supply chain. Such incidents appear to be part of very deliberate criminal strategies.<sup>3</sup> Between 2001 and 2005 the EU experienced at least 27 incidents involving counterfeit drugs and in 2005 counterfeit versions of Pfizer's Lipitor® were found on the market in the UK. When the Medicines and Healthcare products Regulatory Agency (MHRA) ordered the recall of drugs involved in the incidents, over 50% of the returned product was found to be counterfeit. Overall, the European Commission has reported a dramatic increase in illicit drugs trying to access the EU market. During 2005, half a million counterfeit medicines were seized at community borders and these are thought to be only the tip of the iceberg. This ever-growing problem is particularly acute in the UK. There is clear evidence that counterfeiters will exploit any weakness or inconsistencies in EU member states' supply arrangements for medicines.

In the UK, there are a number of factors, such as a complicated supply chain, that encourages grey market activity making the market attractive to the counterfeiting of medicines, including a huge number of prescriptions. The UK has become a common transit position for counterfeit. Counterfeit medicines often pass through the UK en route to other countries. The scale of the problem in the UK is demonstrated by the fact that there have been 14 known incidents of counterfeit medicines penetrating the UK supply chain since August 2004, ranging from antipsychotic medicines to antiplatelet agents and drugs for chemotherapy. As yet no fatalities have been attributed to counterfeit medicines in the UK but it must be remembered that it is extremely difficult to prove that a defective medicine was responsible for death in such circumstances. Moreover, health professionals have a relatively low index of suspicion when confronted with patients who may show signs of lack of efficacy or safety-related drug adverse events. It is possible that a degree of under-reporting may be occurring in the UK.

The MHRA now sees counterfeit medicines as a major public health issue especially given the vulnerabilities in the UK supply chain. These vulnerabilities begin at the point of importation and stretch through to the point of distribution. The MHRA published its new strategy for the next three years to tackle the supply and distribution of counterfeit medicines.<sup>4</sup> Activities include monitoring websites and medicines on sale in pharmacies in conjunction with industry and law enforcement agencies. These strategic activities will focus on resources and production most at risk. The MHRA will encourage thorough reporting and investigation of all referrals of suspected counterfeiting and broadening the targeted market surveillance scheme together with increasing the risk of prosecution for those involved. The MHRA is also collaborating closely with WHO international medical counterfeiting task force, International Medical Products Anti-Counterfeiting Taskforce (IMPACT), which has a permanent focus on international pharmaceutical crime. The worldwide regulation countries, the industry and law enforcement agencies now recognise and are active in concert to mitigate the potential catastrophic public health and safety issues. Where do the health professionals and especially the medical profession fit into this scheme? The key issue is awareness and a

raised index of suspicion when making differential diagnoses where drug activity in terms of safety and/or efficacy may cause one to suspect counterfeit medicines.

## References

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- 4 [www.mhra.gov.uk](http://www.mhra.gov.uk)

## Most significant developments as a journal editor

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I cannot profess to having had a lifetime ambition to edit a health journal but some of life's most pleasant experiences come on you unexpectedly. I have, however, always enjoyed writing and publishing the findings of my own research as well as various texts in support of the new public health has always been one of the joys of my career. Consequently, when Carlos Alvarez Dardet of Alicante approached me in 1996 with the suggestion that we co-edit the *Journal of Epidemiology and Community Health (JECH)*, the BMJ's specialist public health journal, it took but a moment's thought to agree.

The *JECH* that we inherited was the well-established house journal of the Society of Social Medicine. It was the sort of origin which it shared with many of the specialist BMJ journals – the product of a group of enthusiasts wishing to communicate advances in their specialty between its members. In the case of the *JECH* and the Society of Social Medicine, the beginnings had been the fruits of collaboration between social medicine at the London School of Hygiene and Tropical Medicine and social science at Bedford College and elsewhere. It was a respected journal with a strong slant towards academic epidemiology and a desire to translate its insights in socially useful ways. Members of the society were accustomed to the abstracts of the papers that they had presented at their annual conference being automatically published in the journal. As a journal its focus was almost entirely UK and English speaking.

Carlos and I, however, came from a somewhat different place. For myself, my career has represented a clear effort to bridge the worlds of analysis and reflection, policy and practice perhaps best caricatured by an antipathy towards academic activity which demonstrates excellence in the irrelevant towards that which is good enough to make a difference on the ground.