

Blessings and risks of the mobile phone

A number of contributors to the *BMJ* of 15 April have discussed in considerable detail the risks to human health that may or may not be associated with the use of mobile telephones on a large scale. There are more than 50 million of these in the UK.

It is agreed that mobile telephones afford a flexible and simple means of communication, and that they have saved lives through more rapid notification of accidents and emergencies. Nevertheless, concerns about their health and safety are being aired. A report by an independent expert group in 2000 recommended a programme of research and a precautionary approach, especially into

telephone use by children. A major issue has been a possible connection with the brain tumour known as a glioma.

A population based case-control study involving 966 patients suffering from a glioma indicated that, in the short and medium term, the use of mobile telephones was not associated with increased risk of glioma. There were difficulties in estimating telephone use over many years and with different technologies, analogue and digital. There is some evidence that acoustic neuromas and salivary tumours may be related to telephone use.

There is also interest in the phenomenon of electromagnetic hypersensitivity, associated

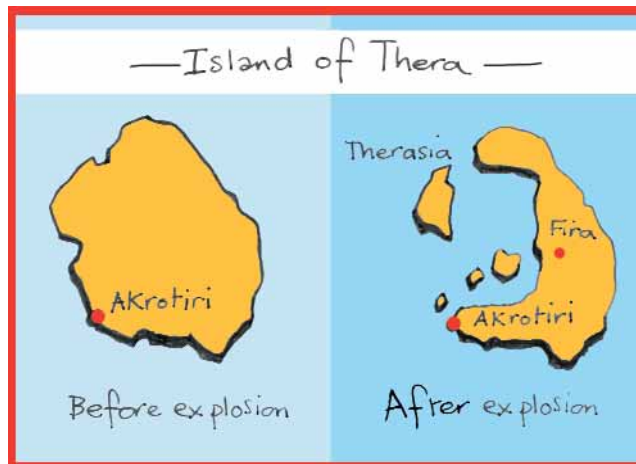
with symptom such as headache, nausea, fatigue, dizziness, and loss of memory or ability to concentrate. In one study evidence was found to indicate that people who had reported sensitivity to a 900MHz signal could detect such a signal, so that psychological factors may have played a role.

It is concluded that the most important established risk with mobile telephones is from using them while driving a vehicle on the road. This is true for both hand-held and hands-free telephones. The fact that driving is legally permitted while using a hands-free but not a hand-held telephone is a discrepancy that must be corrected.

Radiocarbon studies throw new light on Mediterranean civilisations

The volcanic island of Thera (Santorini) in the Aegean has long excited the interest of archaeologists. During the late Bronze Age it exploded with great violence, spreading pumice and ash across the eastern Mediterranean region and affecting climates as far away as California. In the eruption the town of Akrotiri was completely buried and the shores of Crete were struck by tsunamis calculated to reach a height of 12 metres.

In the 28 April issue of *Science* the situation in the light of recent radiocarbon studies was reviewed and it has been suggested that the Thera eruption may have hastened the demise of the entire Minoan civilisation of Crete. Studies of pottery styles and Egyptian inscriptions in the past have indicated an eruption in about 1500BC and radiocarbon findings have consistently yielded a date 100 to 150 years earlier than that. Two new radiocarbon studies by Danish investigators support the earlier date.



Archaeologists now argue that the findings will materially affect our thinking about the complex relationships between Egypt, Minoan Crete and Mycenaean Greece. Others still maintain that the pottery unearthed at Akrotiri since the 1960s bears the style of the late Minoan period when that civilisation was at its peak. Akrotiri finds are thought to span a timescale of 1700–1400BC and recent determinations have indicated 1660–1613BC.

In 2002 scientists unearthed an olive branch with leaves and twigs that had been buried in the volcanic eruption. This yielded a date of 1627–1600BC. It is admitted,

however, that it is difficult to work out from a study of growth rings a precise date. Archaeologists have had to revise their notions on the Hyksos rulers of Egypt, and their relationship with the Mycenaeans, and to give the Hyksos a more important role in the origins of our own culture than they have hitherto enjoyed.

A look at alcohol-related harm and governments' failure to deal with it

Alcoholic beverages have been with us since the human race emerged. They present a challenge never yet faced squarely. There are, of course, two sides to the situation — as Winston Churchill once remarked: "I have taken more out of alcohol than alcohol has taken out of me". And in the world of today so much advantage and profit stands ready to be made from alcohol that we tend to gloss over the darker side of the business.

In Europe 115,000 deaths every year are directly attributable to alcohol and 23 million individuals are alcohol-dependent. The average personal consumption is 11 litres of pure ethanol per year. And UK Government figures released only this week show that alcohol-related deaths in Britain have doubled in 13 years — from about 4,000 in 1991 to

more than 8,000 in 2004. Drink-related hospital admissions in Britain reached a record 183,400 last year.

An editorial in the 10 June issue of *The Lancet* takes a look at alcohol-related harm. Although it is recognised that northern Europe is experiencing increased alcohol consumption, control measures are weakening. There is talk of free trade requirements while there is compelling evidence that greater availability spells greater risk of harm to health and social structures. More people are drinking at younger ages and so violence and crime are on the increase. Treatments for the more than 60 medical conditions known to follow alcohol abuse cost an estimated €17bn to health services and a further €5bn goes to prevent and treat ethanol dependence.

Public education and self-regulation by the drinks industry are considered a waste of time and money in attempts to take control. The Institute of Alcohol Studies has calculated that a decrease of one litre of alcohol consumption per person per year would lower mortality in men by up to 3 per cent. However, European states cannot discriminate against products from other European countries on grounds of health. Moreover, alcohol producers receive a subsidy through the Common Agricultural Policy. So long as negotiations over alcohol policy are dominated by the vested interests of free trade and industry EU governments will avoid their responsibility to protect their populations from the preventable risk of alcohol related harm, says *The Lancet*.