

## Ancient vices

Selfishness, wrote the French historian Alexis de Tocqueville in 1832, "is a vice as old as the world, which does not belong to one form of society more than another." According to the dictionary definition, selfishness means concern for one's self at the expense of others, in terms of profit or pleasure. It is closely allied to greed, in turn defined as "insensate desire" for food or wealth in particular. And in contrast, we should remember that compassion, meaning to suffer with someone else, or fellow-feeling, ranks as a virtue.

In these days of global economics commercial competition is rife — in pharmaceutical products and their promotion as in other articles of trade. One highly regrettable effect of the concentration on economics as the widely accepted *ne plus ultra* is that selfishness and greed flourish and compassion for our fellows shrinks.

We have never recovered from the mantra that "there is no such thing as society". Accordingly, we pay much attention in our educational programmes to techniques for making a profit and neglect those parts of the curriculum that are calculated to make us civilised citizens.

We are bent on amassing more and more material possessions, always lusting after the bigger and more showy things that we hope will show the world that we are superior to our neighbours. This has many of the features of an addiction, and it is sad to see it affecting our children, who are not in a position to judge what things are necessary for a reasonably comfortable living and what are luxuries denied many of our neighbours.

At this season of the year, gross social inequalities are being brought to mind through the increased activities of charity organisations, and we are reminded of the world's extremes of riches and poverty. In many parts of the world people have no access to the remedies for ill-health that we take for granted, and are forced to suffer in a way that we ought not to accept. As we pray for "peace on earth, good will toward men" we might reflect on the concepts of selfishness and compassion and work out how we may overcome the first and encourage the second, not only in our private lives but in our professional activities also.

## Drugs and industry

The pharmaceutical industry has enormous repercussions on medical research and medical journals. In some countries it is the major sponsor of research, which in turn generates a demand for medical and pharmaceutical journalists and their work. Yet, as Astrid James states in a commentary in *The Lancet* for 2 November, the relation between the industry and the journals is uneasy and liable to abuse. Decisions regarding the desirability of offering valuable information that will

improve health care may be separated from those looking to commercial advantage. The primary objective in providing medicines must be to improve the health of populations, not to enrich any particular section of those whose interest is in emphasising some aspect of the economic consequences.

According to a report in the same issue of *The Lancet* by Arthur Rogers, the European Medicines Evaluation Agency, based in London, is to be given greater powers and will be responsible for approving all medicines containing a new active ingredient. Members of the European Parliament have rejected claims from the drug industry that a competitive arrangement would be preferable to a European monopoly. National regulatory bodies will still retain their powers to issue local authorisations for generic drugs and reformulations based upon ingredients that have previously held approval. However, a new drug authorised in one country may not be available in another without delay. It is considered that patients, wherever they live in Europe, should nevertheless have equal access to new drugs. Producers of generics should be able to prepare to launch their product before any patent on the original innovative drug expires, and a period of two years has been suggested.

The European Parliament is firmly opposed to any model of deregulated drug advertising such as occurs in the United States. However, drug companies might be permitted to offer information designed to educate patients suffering from asthma, diabetes or AIDS, to counteract doubtful material already available on the internet.

## Christmas crack-up

*Christmas is a season of such infinite labour, as well as expense in the shopping and present-making line, that almost every woman I know is good for nothing in purse and person for a month afterwards, done up physically, and broken down financially.* — Fanny Kemble, British actor (1809–93): diary entry for 31 December 1874.



## Arsenical world

Certain areas in Bangladesh and India are notorious for the arsenic content of their drinking water, something that has existed for generations. The mechanism behind this effect is perhaps more complicated than was once thought.

In *Science* for 22 November is an account of some findings. In Bangladesh water is drawn from wells for both drinking and agricultural irrigation. Agricultural pumping influences the release of arsenic from the underlying mineral strata into the wells used for drinking water. The solution may lie in constructing deeper wells. Some drinking water in the region contains sufficient arsenic to cause thickening and discolouration of the skin of consumers, and increases the risk of various cancers.

It was formerly supposed that the toxic element was released by the oxidation of arsenical iron pyrites during pumping of irrigation water when the water table was low. Later an expanded theory suggested that iron oxides reduced by buried organic matter might release their associated arsenic. Moreover, much pumping during the dry season brings about replacement of ground water by monsoon rainwater and transport of the toxic compounds through the aquifer.

In experiments where water with added molasses was injected into the ground water source, arsenic concentration of the effluent increased substantially within a few days. This result was attributed to reduction of the iron oxides present by the organic carbon addition, liberating arsenic in a more soluble form. On the other hand, adding nitrate fertiliser to the aquifer caused its arsenic content to fall by some 80 per cent within days. This was explained by oxidation of the dissolved iron and precipitation of the arsenical compounds.

Other factors may also be involved. Paradoxically, in areas where large volumes of water have been used in crop irrigation for many years, arsenic concentrations are much lower on account of different local mineral deposits. Deeper wells for extracting drinking water would solve the problem of arsenical poisoning, but this would prove expensive, and Bangladesh is a poor country.

According to a summary published in *The Lancet* for 30 November, some confusion has arisen because faulty analysis of the water sources has meant that much water pronounced safe for consumption by international health agencies has been found to be otherwise. More sensitive testing kits are now being issued for field use. It would be more satisfactory to carry out tests of water in the laboratory rather than in the field, but unfortunately this would raise the cost of testing some ninefold, a serious obstacle to progress in starving Bangladesh.