medical officer stated this month, scientific research must now be directed more emphatically to these questions.[15]

Widening inequality breeds social problems. Conspicuous consumption becomes more distasteful. The "culture of contentment" among the prosperous induces a politics of vindictiveness and selfish complacency.[16] No evidence exists that charitable, still less egalitarian, motives come to the fore. As Richard Tawney pointed out, in an acquisitive society excessive riches and excessive poverty have common roots in the insufficiently restrained exercise of economic power.[17]

In 1630 Charles I issued orders to regulate free trade in a time of dearth and scarcity. The better off were enjoined "charitably and bountifully to employ some good proportion towards the relief of those that shall be in penury and want."[18] In this year's Christmas message the Queen should explain that she regrets not having those powers but that John Major has; and instead of speaking generally and weakly about pay restraint at the top he should impose a swingeing "responsibility" tax—not only to cap excessive pay increases[19] but also to improve the conditions for all.

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The poor man at his gate

Homelessness is an avoidable cause of ill health

Amid the seasonal excesses it is easy to forget that at the heart of the Christmas story is a homeless family. To restore some balance to what is now a celebration of consumption it is useful to speculate what would have become of Mary and Joseph if—finding themselves in central London—they had presented themselves to Westminster City Council's Homeless Persons Unit. The bleak midwinter is exactly the right time to reflect on homelessness, and as members of a profession doctors have not only the right but the responsibility to speak out on matters of social justice.[1]

Two recent reports do just that. Together they explore evidence pointing consistently to the conclusion that homelessness is destructive of health, and they make an unanswerable case for social investment in housing as a way of protecting the health of our most socioeconomically deprived and vulnerable citizens.[2,3]

The report of a working party of the Royal College of Physicians of London describes a spectrum of housing needs and defines three groups of homeless people each facing increased risks to their health. The first group consists of people accepted as homeless by local authorities under part III of the 1985 Housing Act. The only group officially recognised as homeless, it is comprised mostly of families with children and pregnant women. Their health problems include higher rates of respiratory and gastrointestinal infections, poorer obstetric outcomes, and higher rates of mental illness related to stress in adults and behavioural problems in children. In 1992, nearly 170 000 households were statutorily homeless in Britain.

The second group, which is not officially recognised as homeless and therefore not included in official statistics, comprises people sleeping rough or in direct access hostels. Their health problems include tuberculosis, chronic obstructive airways disease, trauma, foot problems, infestation, epilepsy, severe mental illness, and alcohol and drug misuse. The report points out the difficulties of unravelling the extent to which homelessness causes, exacerbates, and results from poor health. In the 1991 census 2827 rough sleepers and 19 417 hostel dwellers were enumerated, but this is thought to be a considerable underestimate. This week Homeless Network, which represents 30 charities, announced that the number of people sleeping rough in central London had risen by 7% since May. The organisation estimates that 3000 people spent part or all of the past year sleeping on London's streets.[4]

The third group comprises people sharing (often overcrowded) accommodation who express a strong desire to live separately. The report acknowledges that little information exists on this group, but every general practitioner knows of the stresses induced in those who find themselves trapped in his kind of situation with no prospect of escape.

Social housing works

The report by the Standing Conference on Public Health details the history of social housing since the Poor Law Commission of 1838, which was chaired by the great Victorian reformer Sir Edwin Chadwick, and reminds us that social housing in Britain has a 150 year record of effectiveness as a health intervention.[3] Indeed, until 1951 central government's responsibility for housing was placed within the ministry of health. The report goes on to describe the destruction of housing as a public service over the past 15 years. Government spending on housing fell from £13.1 billion in 1979 to £5.8 billion in 1992, while the sale of public sector housing had realised £28 billion by the end of 1993.[5]

The consequent fall in the quantity and quality of local authority housing has led to growing social, economic, and

health disparities between local authority tenants and home owners. This process, described as residualisation, consigns the most socioeconomically vulnerable to the worst housing stock. The lack of investment in decent affordable housing produces and sustains homelessness, which in turn damages health, increases need and demand for health care, and increases the costs of health care.

If the government is serious about improving the health of the nation it cannot ignore the mounting evidence of the impact of socioeconomic inequality on health.[6] It must accept that health care and social care are two sides of the same coin and that artificially separating them works to the detriment of both.[7] No issue illustrates this more clearly than homelessness.

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The animal kingdom bites back

Nature is still red in tooth and claw

Dog bites have long been a favourite of medical authors[1,2]; now it looks as though other animals want a piece of the action. In a world of information overload they have discovered that the most efficient way to attract the attention of humans is to bite them. Human indignation will do the rest—as shown by this week's articles on rat, squirrel, crocodile, prawn, tick, and flea bites.

Early man and woman could not afford our nonchalance to animals and had constantly to guard themselves against predators that might bite them and hence cause their death. More recently, explorers recognised the brutality of our carnivorous ecosystem. As Livingstone graphically described: "the lion . . . besides crunching the bone into splinters, eleven of his teeth had penetrated the upper part of my arm. . . ."[3] Even today, crocodiles still wreak death and destruction in parts of Africa (p 1691),[4] while some animals, like snakes, "might bite you just for fun."[5]

The vivid imagery of the jungle, with creatures preying on unsuspecting humans, diverts our attention from the true risks of bites to our health nearer home. Small everyday creatures can be just as dangerous as elephants or tigers. In 1923 the Earl of Carnarvon avoided the rabid dogs on the streets of Cairo but died of an insect bite; in 1994 the owner of a pet rat in Hemel Hempstead suffered multiple abscesses (p 1694)[6]; in Edinburgh grey squirrels are biting their benefactors (p 1694)[7]; and now prawns have been shown to disfigure human digits (p 1695).[8]

Some public health specialists believe in mass animal slaughter or incarceration of animals. Wholesale slaughter seems the right strategy for animals as irritating as midges,[9] and locking tigers up seems sensible. But such draconian measures ignore the fact that some bites do more good than harm—for example, leeches help in microsurgery (p 1689).[10]

Scientists must concentrate research on the relationship between animals and humans to identify ways to reduce the risks of bites occurring. Has it been established that animals are responsible for biting humans? We now know that animals can think,[11] and inconsistencies in how humans treat them may confuse the animal psyche. Animals are eaten, poisoned, trained as assassins, given haircuts, and forced to perform with Danny Baker on television. Is it unsurprising that they occasionally bite back? Work with dogs has shown that much of their angry behaviour is caused by their owners treating them like humans. In these cases expert intervention from animal psychologists may be beneficial, although good quality evidence of effectiveness is lacking.

While awaiting the results of further research, we can act on the basis of what we already know. Health promotion specialists must draw on interventions outlined in the medical literature—for example, Halpern and Munro recommend tucking trousers into socks to avoid ticks (1693).[12] Only with a concerted effort by doctors, researchers, and the public can we hope by the next millenium to have an ecosystem that is bite free, at least for humans.

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