cholesterolaemia is found and the decision is made to measure the low density lipoprotein cholesterol concentration. Many laboratories use an indirect measurement of this which requires knowledge of the triglyceride concentration. Consistent evidence that triglycerides have an important independent role in the prevention of coronary heart disease, however, remains elusive; calls for triglyceride testing must appeal to faith rather than established fact.

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Excessive expenditure of income on treatments in developing countries

EDITOR,—R J Hay and colleagues draw attention to an important issue for many developing countries—namely, excessive expenditure of limited disposable income on ineffective treatments.¹ Whereas in Mexico pharmacists, private doctors, and traditional healers seem to be most to blame,¹ in China the problem permeates the entire health care system.

The introduction of a market based economy into the health care system in China since the early 1980s has meant that health professionals and hospitals have to generate most of their income, including the salaries of staff in many cases. Central directives ensure that the cost of basic medical care (for example, consultation fees and bed occupancy) are kept low while profits are made almost entirely from charging for drugs and for the use of technology.

Drugs can be charged at a mark up of 15%, which leads to massive overprescription and in particular to excessive use of injections and infusions. This results in two extremes: the 15% of the population who have some health cover (mostly state employees) and rich people are showered with often useless medicines, while many poor people are afraid to seek health care because of inability to pay for the drugs that will be prescribed. In the middle are the majority, who waste limited resources on ineffective and sometimes dangerous treatments.

Our survey of village health clinics in Zhejiang province, eastern China, in 1993 showed that for upper respiratory tract infections in children an average of four drugs were prescribed at every visit. The drugs were usually a mixture of traditional Chinese and Western treatments, the Western treatments usually being antibiotics. In township hospitals an intravenous infusion is a standard treatment for upper respiratory tract infection and fever in children. The average annual per capita income in that part of China is about 750 yuan (13 yuan = £1). We estimate the drug cost per visit to be around 15-20 yuan; this increases if injectables or infusions are used.

The current funding mechanisms mean that health practitioners and hospitals cannot survive without this source of income. The problem will become intractable unless radical steps are taken to develop alternative strategies for funding health care.

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Protection afforded by cycle helmets

EDITOR.-Frank McDermott and John Lane defy engineering evidence in stating that cycle helmets reduce the risk of serious head injury in accidents involving motor vehicles.1 Their study, however, looked only at people who had contacted health services after being injured and included no facts on the relative risk of injury with and without a helmet. Their data do not form a valid basis for their assertion.² They fail to mention the work of Spaite et al, who studied cyclists attending a university trauma centre after being hit by cars. Both head and non-head injuries of people who had voluntarily been wearing helmets were less severe than those of people who had not been wearing helmets. Presumably people who voluntarily wore helmets behaved more cautiously in general, perhaps riding more carefully or being more likely to attend hospital after an accident.3 This sort of confounding means that studies of voluntary helmet wearing cannot test the hypothesis of protection conferred by helmets.

McDermott and Lane argue that the results of mandatory use of helmets in Victoria, Australia, support the suggestion that helmets have a protective effect against impact from cars. In the first year of compulsory use of helmets, however, cycle use decreased by about 40% while overall deaths of non-cyclists on the roads decreased by 25%.4 Both head and non-head injuries to cyclists decreased. We suggest that the information from Victoria is not adequate to indicate what, if any, effect compulsory use of helmets is likely to have on injury rates. Human behaviour is too confusing and complex for valid analysis in the face of insufficient numbers, inadequate information, inconstant underlying trends, and a poor scientific approach to data that are selectively quoted and potentially biased from the point of collection.5 The published work on Victoria displays all of these problems.

Many people find cycle helmets uncomfortable and expensive. Such helmets were never designed to give adequate protection against impact with a motor vehicle. Evidence suggests that compulsory use of cycle helmets would harm health by stopping people from cycling without affecting injury rates. Cycle helmets should remain a matter for free individual choice. Roads safe for everyone are the only real solution.

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Effects of health publicity on prevalence of smoking

EDITOR,—Joy Townsend and colleagues' study of the effects of price and health publicity on cigarette smoking used a broad definition of publicity, which may lead to misunderstandings.¹ The definition was, in effect, a measure of "everything else except price"—which, as the authors acknowledge, comprises a much wider range of influences than publicity alone.

The authors found that health publicity, as they defined it, had had relatively less influence on the smoking habits of more disadvantaged socioeconomic groups, so adding to inequality. The effect of mass communications-that is, health publicity as it is usually defined-seems, however, to depend on the medium used. For example, studies of rates of stopping smoking between 1950 and 1980 in the United States suggest that health scares in the 1950s, which were largely carried by the print media, had relatively little influence on the prevalence of smoking in more deprived groups relative to the population as a whole. These groups were much more responsive, however, to later publicity in the electronic media-especially the "fairness doctrine" antismoking campaign on television between 1967 and 1970.² Smokers in all social classes responded equally to Sydney's "quit for life" campaign on television in 1983.3

Television, which is generally watched more by members of social classes C, D, and E, is therefore a potentially class free medium for health promotion in comparison with the print media, though these probably have a correspondingly greater influence on decision makers.

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Vitamin K for neonates

EDITOR,—Mary Newburn and Rosemary Dodds discuss administration of vitamin K in relation to breast feeding.¹ Von Kries and Göbel have raised concerns about the efficacy of prophylaxis with oral vitamin K.² Oral administration is recommended because of the potential carcinogenic risk of parenteral administration in neonates. Surveillance data on late haemorrhagic disease of the newborn in Germany, however, suggested that the incidence of the disease increased after a switch from parenteral to oral prophylaxis. This is in sharp contrast to our data.

In the Netherlands it is recommended that all babies should be given 1 mg vitamin K orally or intramuscularly after birth and that breastfed