Letter from . . . Chicago

Cadillacs and garbage trucks

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The luxuriant growth of America's not-for-profit hospital industry would excite less controversy if it were not so heavily subsidised by public funds—either directly or through advantageous reimbursement formulae and favourable tax rules. Last June even the ailing Mrs O'Leary (an imaginary old lady who lives only in the pages of the *New England Journal of Medicine*) had no difficulty in grasping the immense possibilities of what in essence is an investor's dream: borrowing money interest-free, and then paying no taxes on subsequent profits.¹ This the voluntary hospitals apparently achieve, on the one hand, by having Medicare and insurance carriers reimburse them for interest paid on loans relating to patient care activities (including mortgages), as well as for the wear and tear of their buildings and equipment (depreciation); and, on the other hand, by being exempt from paying taxes by virtue of their not-for-profit status. So that under these arrangements a hospital could borrow, build, borrow some more, and eventually eat up Chicago, or Philadelphia, or, for that matter, any large city in need of a vigorous slum clearance programme.¹ But even the world-wise Mrs O'Leary would have had trouble reinvesting the profits without timely help from one of the newspaper exposés that periodically enliven the dreary monotony of our virtuous city.²

Mrs O'Leary has now learnt how a not-for-profit hospital collecting millions of dollars from Medicare can operate a for-profit restaurant owned by the hospital's executive director, or lease laboratory equipment from a company belonging to two of its doctors and its former executive director; how hospitals may have management contracts with firms controlled by some of their directors; how hospital trustees may own companies providing legal advice, hospital food, laundry and uniform cleaning, electrical work, lease of medical equipment, insurance, and investment services; how a voluntary hospital director may use not-for-profit hospital funds to pay the salaries of doctors working in his private clinic as well as his own salary of \$250 000; and how government funds may be used to lobby against the Government's cost containment Bill. Of particular interest to Mrs O'Leary has been the little hospital that invested Medicare funds to operate a health club for top hospital administrators and select businessmen, so that at all times of the day sporting gentlemen with small bags would be seen rushing through the back door to exercise in an area ostensibly built for patient rehabilitation. This hospital, incidentally, also paid hundreds of thousands of dollars rent to secret land trusts whose beneficiaries were the owners and trustees of the hospital; used \$185 000 to purchase the "goodwill" of a clinic belonging to the trustees; and spent large sums for public relations and for leasing a fleet of Cadillacs for the directors and administrators.² An official investigation, now under way, should offer even better ideas for the investment-hungry old lady.

All the healthy people

Last July, in one of his last official acts, outgoing HEW Secretary Joseph A Califano released the first *Surgeon General's Report on Health Promotion and Disease Prevention*. Emphasising that Americans today are healthier than ever, the report describes an impressive reduction in infant and childhood mortality as well as a lengthening of the average life span to 73 years and a lowering of the death rate from heart disease by 22% within one decade. But the report also points out that many Americans kill themselves by smoking, drinking, overeating, and needless accidents; and that much could be achieved by relatively modest changes in life style such as eliminating cigarette smoking; reducing the abuse of alcohol; some reduction in the intake of fat, sugar, and salt; moderate exercise; periodic screening for hypertension and certain cancers; using seat belts; and obeying the speed limit. Urging increased reliance on the goddess Hygieia rather than on her sister Panacea, the report calls for a second health revolution, emphasising that only 4% of all federal health expenditures are specifically allocated to prevention, and that much remains to be done in modifying personal habits, reducing risks at the work place, lessening environmental pollution, and eliminating poverty, hunger, and ignorance.³

The report, attractively bound and entitled *Healthy People*, comes close on the heels of a much more extensive government publication, the 1979 Surgeon General's report on *Smoking and Health*, brought together by 10 agencies of the United States Public Health Service and based on an accumulation of some 30 000 articles from all over the world.⁴ Extending the findings of the 1964 report, the present report indicates that cigarette smoking remains the single most important preventable environmental factor contributing to illness, disability, and death in the United States. Yet, in 1978, some 54 million Americans smoked 615 billion cigarettes, at an estimated cost of \$27 billion in medical care, absenteeism, decreased work productivity, and accidents. Furthermore, the overall percentage of women smokers has remained unchanged, the mortality from lung cancer in women has risen fivefold since 1955, and there has been an alarming increase in teenage smokers, especially girls, so that in the age group from 13 to 19 there are now six million regular smokers.

The report points out that a man smoking two packs of cigarettes a day has twice the normal death rate, so that at the age of 30-50 years he has a life expectancy some eight to nine years shorter than that of a non-smoker. Overall mortality is higher in people who inhale, increases with the tar and nicotine content of the cigarette, but declines in former smokers as the years of discontinuance increase. Smokers report excessive chronic bronchitis, emphysema, sinusitis, peptic ulcer, and arteriosclerotic heart disease; there are strong associations with peripheral vascular disease and arteriosclerosis of the aorta; and there are positive associations with cancer of the oesophagus, urinary bladder, kidney, and pancreas. And, although mortality is particularly high for cancer of the lung or larynx and obstructive lung disease, the chief contributor to the excess

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mortality among cigarette smokers is coronary heart disease. Women who take oral contraceptives are at significant risk for myocardial infarction; smoking during pregnancy increases the risk of spontaneous abortion, fetal death, and other complications—the babies being about 200 g lighter and at risk from long-term physical, intellectual, and emotional ill effects, at least up to the age of 11.

Cigarette smoking also acts as a promoter or cocarcinogen, dramatically increasing the risk to workers in asbestos, rubber, coal, textile, and uranium industries. Pipe smokers also experience a slight but definite increase in overall mortality, having a three to five times higher chance of dying from cancer of the mouth, larynx, or oesophagus. Smoking may induce allergic manifestation, interfere with certain body defences—notably in the respiratory tract—and may cause leucocytosis and eosinophilia. Being a mixture of many noxious substances, it induces enzyme changes and may alter the metabolism and clinical effect of phenacetin, theophylline, caffeine, imipramine, and pentazocine. Given that a lighted cigarette generates about 2000 compounds (separable into a solid or “tar” and a gaseous phase), no wonder that the ensuing physiological effects are quite complex. The main pharmacological agent, however, is clearly nicotine, which releases catecholamines, has a multitude of cardiovascular and metabolic effects, and is the main substance to which dependency has been related.

The report also indicates that much has been learnt about reducing the toxic activity of cigarette smoke, about the behavioural effects of smoking, the receptors for nicotine in the central nervous system, and withdrawal symptoms when people stop smoking. It is now believed that abrupt cessation of smoking is rather more effective than partial abstinence, which may induce a chronic withdrawal syndrome typically leading to relapse. It would also appear that withdrawal symptoms are more severe in women, who therefore may experience more difficulty in stopping the habit. Finally, while current evidence does not implicate smoking in the aetiology of chronic hypertension, it clearly condemns it as an additional risk factor in people who already have established hypertension⁴—a condition that in the past decade has received much attention in the United States.

Pills galore

It is quite likely, indeed, that the vigorous effort to treat hypertension has done more to decrease the death rate from cardiovascular disease than any other change in life style. Much of the incentive for this massive effort came from the Veterans

Administration Co-operative Study, which did not, however, convincingly show the value of treating patients with diastolic pressures of 90 to 105 mm Hg. Because of this, the findings of the recent randomised study of over 10 000 people have attracted considerable attention, and the 17 to 20% lower five-year mortality rate in the treatment group suggests the need to treat even the mildest forms of hypertension.⁵ Yet there are staggering financial implications; for, while generic hydrochlorothiazide (a first-line drug) and hydralazine (a third-line drug) are quite inexpensive, the widely used propranolol, clonidine, and prazosin, when prescribed in multiple daily doses, substantially add to the overall drug bill. A recent interest in the use of the inexpensive drug reserpine is therefore noteworthy, it being declared by several authorities as effective and well tolerated, safe, and not causing breast cancer—leading the *Medical Tribune* to criticise earlier alarmist reports and to suggest that reserpine had been “smeared.”⁶ Only time will tell whether reserpine can make a comeback against the more popular but also expensive other antihypertensive drugs.

Still on the subject of pills, Mr Mike Royko recently described how an unknown person decided to hand in to the police a large supply of psychotropic drugs, estimated at a street value of some \$100 000. Whatever the reason for this generous act may have been, it caused the young policeman to set about following the regulations by counting and writing down the names and quantities of all the recovered pills—until his boss told him to stop wasting time and dump the whole lot in the garbage can. Later, the garbage man recovered the loot in the assumption that the pills might still have some potential value, but, on having a car accident, was arrested for illegal possession and put on a \$100 000 bond. It may all turn out rather embarrassing for the police, who could be accused of being accessories by giving away the material, unless, as predicted, the results of the investigation will also end up in the garbage can.⁷

References

- 1 Fisher GR. The hospital that ate Chicago. *N Engl J Med* 1979;301:56-7.
- 2 *Chicago Tribune* 1979 Dec 16, 17, 18.
- 3 *Healthy people: the Surgeon General's report on health promotion and disease prevention*. Washington: US Department of Health, Education, and Welfare, 1979 (Public Health Service, publication No 79-55071).
- 4 *Smoking and health: a report of the Surgeon General*. Washington: US Department of Health, Education, and Welfare, 1979. (Public Health Service, publication No 79-50066.)
- 5 Hypertension Detection and Follow-up Program Co-operative Group. Five-year findings of the hypertension and follow-up program. *JAMA* 1979;242:2562-77.
- 6 Horwitz N. Has reserpine been smeared? *Medical Tribune* 1979 Dec 5.
- 7 Royko M. Evanston's bouncing pills. *Chicago Daily News* 1980 Jan 2.

How is the differential diagnosis made between (a) acute alcoholic poisoning, (b) acute lysergide poisoning, and (c) acute schizophrenia when there is no history of any previous illness and a patient presents with symptoms of hallucinosis and amnesia?

The physician must obtain a complete history of the events leading up to the acute illness from the patient after recovery from the acute stages and from those who were with the patient at the onset of the illness. The diagnosis will depend very much on this history. Such conditions as delirium tremens or barbiturate-withdrawal psychosis are more likely to be the cause if the patient drank extremely heavily or took large amounts of barbiturates in the period before admission. If there is no such history they may be instantly excluded. Psychoses due to such drugs as LSD, amphetamines, or phencyclidine may again be relatively excluded if there is a reliable history that the patient never takes illicitly obtained drugs and has definitely not taken LSD or any other such substance. (There have been rare cases of hallucinations due to the accidental ingestion of psilocybin mushrooms, but the history after the event will make this clear.) If there is no history of taking drugs or alcohol, nor of their sudden

withdrawal, schizophrenia or a schizophrenic reaction must be considered a more likely diagnosis.

Drugs and alcohol may be taken by those with other illnesses, and a patient who smells of alcohol may also have ingested amphetamines or have a schizophrenic illness. If there is no history of previous schizophrenia it is unlikely that the symptoms of an acute illness of this type would have been due to the fortuitous onset of a sudden, severe schizophrenic illness in a case where drugs had been taken. Acute alcohol poisoning includes a progression from severe intoxication to coma and death. The history of ingestion of alcohol, the smell of alcohol on the breath, and blood alcohol concentrations will confirm if this is the cause. Urine analysis on admission to hospital may confirm suspicion of a drug-induced psychosis. However carefully the phenomenology, the continuing symptoms of the illness, and the mental state are examined it is unlikely that they will do much to clarify the differential diagnosis, which depends on an accurate history of the events leading up to, and the onset of, the illness. The history is all: if it cannot be obtained from the patient it must be obtained from others.