

on the country's medical profession, a multiracial profession there as elsewhere. It deserves support in its efforts to reach a just and humane solution.

<sup>1</sup> *British Medical Journal*, 1976, 1, 397.

<sup>2</sup> Smythe, P M, et al, *South African Medical Journal*, 1976, 50, 235.

<sup>3</sup> Wallace, H L, *South African Medical Journal*, 1976, 50, 235.

## Older smokers

A European survey carried out by the World Health Organisation<sup>1</sup> has estimated that 60% of the adult population in Belgium and 35 to 40% in Greece smoked; in Sweden 42% of men and 35% of women and in the United Kingdom 65% of men and 42% of women were found to smoke cigarettes. Figures published by the Tobacco Research Council<sup>2</sup> showed a slight fall in smoking by men and women aged 35 years or more. Swedish figures for both sexes aged 40 years or more suggested a similar decrease. In a recent study of a large representative sample of Australian adults Gray and Hill<sup>3</sup> reported that only 41% of men and 29% of women smoked—figures lower than those reported for any European country. Again, however, the highest rates of smoking were found in 20–24-year-olds. This study also showed that the Australian-born persons smoked less (34%) than British-born migrants to Australia (43%) or those born elsewhere (39%). The proportion of smokers among men aged 55 years and over was well below the level for the whole Australian population. In women, smoking rates fell between the ages of 35 and 44 years; this was followed by a rise in the 45–49 age group and then another reduction. In general, all countries showed a similar pattern of smoking by people over 40, but the number of smokers was less in Australia.

Gray and Hill<sup>3</sup> suggested that the lower rates of smoking by older men were due to the combined effects of illnesses caused by smoking, health education, and press publicity. They explained the older women's lower rates as a reflection of the social taboo against women smoking. Older people may smoke less for various reasons. These may include less disposable income, lower food consumption, and past illnesses related to smoking—with a consequent realisation that smoking can be harmful to health. As the expectation of life becomes shorter, preserving or extending it may be more important. Many older people make efforts to cut down or give up smoking altogether. Health education may scratch the surface and have some effect, and cigarette smoking may no longer be the important social crutch it may have been in youth.

Why do Australians smoke less? And why do British migrants to Australia smoke less than other smokers in the United Kingdom? Is the life style the major contributing factor? It is well recognised that migrants are a selected group who would in general have acquired their smoking habits before arriving in Australia. They might be fitter and more enterprising; but they would also include many in whom migration was a manifestation of temperamental instability.<sup>4</sup> Overall prevalence rates of smoking and consumption of cigarettes per caput per year are insufficient to make valid comparisons between countries. More detailed information covering a number of years and including data on age, sex, and social class from different countries would help in analysing smoking by "healthy" people. A standard format of reporting

would be valuable, as would annual surveys carried out on representative samples of the population. There is still not enough information about this major hazard, which remains insufficiently monitored. In the meantime we can only speculate. Perhaps Australia has sufficient "Marlboro Country" characteristics to make it unnecessary to smoke to get there.

<sup>1</sup> World Health Organisation, *Survey on Smoking and Health in the European Region 1974–1975*. Geneva, World Health Organisation, 1975.

<sup>2</sup> *Statistics of Smoking in the United Kingdom*. London, Tobacco Research Council, 1974.

<sup>3</sup> Gray, N J, and Hill, D J, *Medical Journal of Australia*, 1975, 2, 819.

<sup>4</sup> Reid, D D, *American Journal of Epidemiology*, 1975, 102, 469.

## Iatrogenic gallstones

Gallstone disease is exceedingly common in developed societies. Many associations and relationships have been suggested, including some which are rather dubious.<sup>1</sup> Gallstones occur more often in women, and probably to a larger extent in those who are obese and secund.<sup>2 3</sup> Moreover, modern medical treatment may predispose to cholelithiasis, for an increased frequency has been reported in association with gastric surgery, ileostomy and ileal resection,<sup>4</sup> and the use of low animal fat diets,<sup>5</sup> clofibrate,<sup>6</sup> and oral contraceptive pills.<sup>7</sup>

The great difficulty in determining the role of these various medical procedures in causation is having to decide whether an increase in gallstone disease has occurred when it is known that there is naturally a high prevalence of cholelithiasis in the community. Routine cholecystographic screening in a community is not possible, for it carries an appreciable radiation hazard; and in any case it does not necessarily provide the required information. A radiological survey<sup>8</sup> of 1233 apparently normal men showed that 7.5% had stones but also that 5.2% had nonfunctioning gallbladders: the interpretation of these data is difficult. Cholecystectomy rates have been used as an index of gallstone prevalence, and in this way have been used as evidence that the increased use of the oral contraceptives has been accompanied by an increase in gallstone disease in women of childbearing age.<sup>7 9</sup> Unfortunately operative rates may well reflect changing fashions in surgical management, and there is evidence that they do not accurately represent the rate of cholelithiasis.<sup>10 11</sup> Postmortem studies do provide useful data of a kind on gallstone prevalence, but there are difficulties in extrapolating to the general community. They provide little specific information about the changing prevalence in younger age-groups because of the small numbers coming to necropsy. Furthermore there are some curious variations which require the most careful standardisation.<sup>12</sup>

Most gallstones in developed countries are rich in cholesterol. The requirements for the solubility of cholesterol in bile have been clearly identified.<sup>13</sup> When the capacity of the bile acid/phospholipid micelle to hold cholesterol is exceeded, precipitation of cholesterol occurs and stone formation is possible. Sampling bile-rich duodenal fluid<sup>14</sup> can predict the potential for gallstone-formation within communities but not for individuals.<sup>15</sup> It was analysis of biliary lipids that led to the prediction that clofibrate therapy would be accompanied by an increase in gallstone disease before the clinical evidence became available.<sup>6</sup> None the less, measures to correct hyper-