

Problems of population control

On 23 March 1974 a successful symposium on the problems of population control was held by the South-east Wales Faculty of the Royal College of General Practitioners at the University Hospital of Wales, Cardiff, under the sponsorship of Geigy Pharmaceuticals.

Although a co-operative effort on the part of the Faculty, the symposium largely owed its success to Dr Brian Wallace, the Faculty Secretary, whose planning and organisation had taken two years and now culminated in bringing together an interesting set of speakers, whose disparate backgrounds and, in one case, divergent outlook, made for a stimulating exchange of views.

Dr P. H. Thomas

Welcoming the visitors with the resounding words '*Croeso i Gymru, Groeso i Gaerdydd!*' the Faculty Provost, Dr P. H. Thomas, went on to remind his audience that on the basis of present-day projections the population of Britain will have increased from its 56 million today to 74 million by the end of the century, by which time the word population will have doubled.

The Day of the Apocalypse is therefore upon us and we have to declare whether we are for the prophets of doom (Prof. Meadows *et al.*, of the Club of Rome, *Limits of Growth*), or the prophets of boom and bloom (the University of Sussex school, *Thinking about the Future*), bearing in mind that population forecasts in the past have been notoriously inaccurate.

Professor C. R. Lowe

The Chairman of the first session, Professor C. R. Lowe, Professor of Social and Occupational Medicine at the Welsh National School of Medicine, opened the symposium by pointing out that we are confronted by four challenges—a third of the world's population is starving, our habitat is being rendered uninhabitable by industrial and domestic fouling, we are exhausting the natural resources of the world, and we have an explosive rate of population increase. Malthus had already clearly expressed the latter challenge as long ago as 1798 and his ghost was standing in the wings even now, at this symposium. (With anxious glances at the ultra-modern lecture hall, we wondered which was the anachronism.)

The Twin Horsemen of the Apocalypse

Dr J. Loraine

Dr John Loraine, Chairman of the activist Doctors and Overpopulation Group which has many eminent men among its membership, presented the first paper. Traditionally there were four horsemen of the Apocalypse—war, famine, disease and death; now there are two—overpopulation, and excessive industrialisation produced by policies of unfettered economic growth. Both are global issues which can only be dealt with at an international or preferably supranational level.

The vastness of the scale of population increase is difficult to grasp. Between 1972 and 1973 the excess of births over deaths was about 80 million; this is considerably more than the total killed in World Wars 1 and 2, about the same as the population of Bangladesh, and more than the combined populations of France, Belgium, and the Netherlands.

Population pressure is most acutely felt in the third world, where in many parts 40 per cent of the population is under 15 years of age, as opposed to 25 per cent in Europe. Their procreative capacity is enormous and most sexual intercourse takes place without contraception. Besides, in poor, underfed and illiterate countries, children are produced to secure support in sickness and old age, so it is an essential prerequisite for any successful population in the third world that standards of living be raised.

In some Asian countries the problem is at least recognised, but in Africa and Latin America, where population densities are generally lower, it is largely ignored. Furthermore, heads of state continue to cling to the now outdated belief that an increasing population spells power, prestige, prosperity, and mounting international authority—hence their pronationalist political

rhetoric. The ineffectiveness of lack-lustre family planning programmes is partly due to their having been initiated in an inappropriate political, social, and economic context.

In parallel with overpopulation the planet's finite resources are being blithely squandered with profligate abandon and with gross inequity in their distribution. Sooner or later the developed countries will have to realign their economies to take into account the economic aspirations and requirements of the third world by, for example, guaranteeing higher returns from exports from the developing world, and complying with the UN recommendation to devote 0.7 per cent of their gross national product to helping poorer nations.

The ethos of unfettered and unrestricted economic growth based on unlimited supplies of cheap energy and raw materials can no longer be sustained. In 1973 the views expressed in *The Ecologist's 'Blueprint for Survival'* and the Club of Rome's *'Limits to Growth'* were triumphantly vindicated.

In the United Kingdom, realistic series of proposals for an energy policy are needed, along the lines set out by Lord Avebury in his presidential address to the Conservation Society last November. He suggested:

(1) A permanent *Energy Commission*, independent of Government and the fuel industries, with powers to support research, and accountable to the public,

(2) A campaign to spend energy more economically, by use of public transport rather than energy-wasting private cars, by improved domestic insulation, and industrial savings at all stages of production,

(3) Highly energy-intensive projects such as Concorde, Maplin and the Chunnel should be looked at again and probably jettisoned without delay,

(4) Reassessment of the whole nuclear energy programme, bearing in mind the various dangers and consequences,

(5) Massive research into alternative sources of energy should be undertaken—solar, geothermic, tidal, windmill and chemical; these might be relatively pollution free.

In brief, we must recognise and accept that we are *already* in the "post growth" era. This will have to be based on high quality durable goods, constant population size, minimising pollution and resource depletion, on ecological and environmental responsibility, harmonious distribution of wealth among individuals and nations, and a fair society which caters adequately for its sick and disabled.

Growth, technology and the pursuit of wellbeing

Mr R. Allen

Mr R. Allen was recently Joint Editor of *The Ecologist* and so approached the subject from a different angle.

Population growth may have been triggered off by technological innovation, as when the digging stick gave way to the hoe, and the hoe to the plough, making multicropping possible. Man has farmed for the last 60,000 years but his population increases were modest. Of the 80 billion humans who ever lived, 90 per cent have been hunters and gatherers; the food-collecting way of life had proved the most successful way of life ever achieved. Now our politicians are evangelists of the industrial way of life with all its attendant difficulties, and we are confronted by the question of what we mean by a high standard of living; what is the 'quality' of life?

The yardsticks we use to access these imponderables seem wildly inappropriate. The gross national product, so often quoted, is not an adequate measure of wealth nor is it a useful index to national wellbeing as it includes, for example, the profits of the cigarette industry, the salaries of the medical staff attending the cigarette smoker in his preterminal and terminal cigarette-induced illnesses, and the earnings of his undertaker. Not every transaction taken into account therefore necessarily reflects an unmitigated benefit to society.

Other yardsticks suffer from the limitation of being based on ethnocentric notions, such as social criteria—security and so forth—health, cultural or psychological considerations. What is needed perhaps is a set of criteria with transcultural validity. Among the possible components of wellbeing advanced by Stephen Boyden of Australia are: well balanced diet; appropriate calorie intake; daily exercise; clean air; minimal contact with pathogens and toxins; opportunity to rest and sleep; natural outlets for the sex drive; the opportunity to be creative and enjoy

spontaneous conversation; freedom to move at will from the group or within it; a chance for the mother to leave her children in the care of others at times; freedom from undue noise; the stimulus of change in the visual environment; the opportunity for self-expression; excitement and purpose in life; and emotional involvement.

These components were more fully realised in the paleolithic age than at any time since. Perhaps we should be better employed trying to fulfil these rather than striving after diversionary and irrelevant goals such as a high GNP.

If we are to attempt to solve the present problems besetting the world, our ethical position has to be established. We have to face that impoverishment in the world is due to overpopulation and to injustice in distribution of wealth; it is incumbent on us to correct both. We can, however, do very little because of the long time lag between resolution and effective implementation, and because the mechanics of population control are secondary to motivation to stay within the replacement rate.

It might perhaps be better to do nothing, rather than introduce factors which could further disturb the ecology. There is a need for social justice, though. We should also anticipate that when a population declines, there is a predominance of elderly people, and when it grows, of young. But we have also to remember that a smaller population does not necessarily mean the end of prosperity; if the GNP is anything to go by after all, we should look at Sweden and Australia.

Why worry?

Professor H. Campbell

Professor H. Campbell, Professor of Medical Statistics at the Welsh National School of Medicine, drew gasps of astonishment at his optimism from many of those present. Why worry, indeed? We have no real prospect of escaping from our environment or, hence, of destroying our resources. There have been a million or more biological species and any one could at any time have multiplied in such a way as to destroy the ecosphere. But none has. One bacterium dividing every half hour would theoretically in a week occupy the whole universe. But it doesn't. So it's all a mathematical game.

In the event dynamic equilibrium is achieved and a system of ecological balance set up. However, man could prove the exception; he does in fact destroy his own species.

Among the reasons for optimism are that life expectation is increasing in different continents; almost everywhere mortality has declined. Limited resources show first in fetal loss and the mortality of infant malnutrition; during the last 20 years the greatest advances have been in reduction of mortality in these maternal, fetal and infant groups.

(On the other hand there has been increased mortality in heart disease and new growth, affecting mainly the post-reproductive middle-aged male—an increase in the “diseases of over-indulgence”.)

A difficulty does arise in assessing the global situation, however, for overall figures are not available. In those countries where adequate records are kept (comprising one third of the world), birth rates have declined and fertility is stabilising itself. Nevertheless, we are at an explosive stage because of the availability of new resources, yet in China where population has indeed increased, grain production has kept well ahead of increased need. Human ingenuity always seems to come up with the answer. The Indian subcontinent is the only place where there is a real problem.

Why therefore do we maintain that we are in a desperate predicament? Are we feeling threatened? We are indeed threatening our own species, so perhaps we are sick in spirit.

The agrarian revolution in the Middle East, Southern European and Mediterranean countries of the last 10,000 years led to city states and thence to the megalopolis. The great conurbations of the future will be Nairobi, Lima and Rio de Janeiro but at present there is no evidence of pressure of population and as far as Professor Campbell was concerned he was looking forward to a future in which things would be improving.

Discussion

In discussion, Mr Allen said we don't worry because by the time the projection figures have come true we will all be dead or senile; in his view Professor Campbell's complacency was

unfounded. Dr Loraine was on this side too; asked by Dr Donaghie whether in the interests of eugenics above-normal families should not be bigger, he replied that eugenics are irrelevant now—we are in too much trouble already with sheer numbers to worry about eugenics.

In the event, a London doctor said, it is the female who decides on the size of her family; if she feels the environment cannot support an addition to her family, she “throws it away”. Mr. Caspar Brook (formerly Director of the Family Planning Association) said that one sixth of all pregnancies in the United Kingdom are terminated by induced abortion, and this stems from the fact that only one third of the fertile population practises reliable contraception consistently.

Mr Allen described how the Bushmen, successful food-gatherers, manage to succeed; their womenfolk commit infanticide because of the load-bearing incentive to spacing their children. Travelling considerable distances across the desert as they do and necessarily laden with provisions anyway, it is a physical impossibility for them to carry more than one infant as well. This is a simple matter of survival, but Dr Loraine pointed out that the ethics of family planning and of population control are not necessarily the same. The success of the People’s Republic of China in controlling its numbers has been due to government interest in the sex habits of the populace. For our part we of the industrial West lack the ethical commitment that we should have to the non-industrialised world, as represented especially by Bangladesh. Mr Allen repeated that we need fairer trade policies and more intelligent aid to help develop the third world countries.

The Chairman, summing up, said that doctors are in part responsible for preventive measures; failure to use these had led to the population rise. Motivation to restrict family size is more important than the actual method employed. We have to face up to the need for zero growth and a more equitable distribution of resources.

To grow or not to grow?

Dr J. N. M. Parry

Reconvening the afternoon session the Chairman, Dr J. N. M. Parry, Founder Member and Past President of the Faculty, asked whether dictatorship is the only answer, if the only things we can agree about are trivialities. Are we perhaps breeding in the third world a resistant organism which will cause a pandemic? On the other hand, the dinosaurs carried a self-limiting gene for limited fertility and, nearer home, the Basques are a self-limiting people.

Dr J. H. Hughes

Nearer home still, the Aberystwythians are a self-limiting people too, as the symposium heard from Dr J. H. Hughes in his address *Population Control and the Family Doctor*. Over the last six years family size has fallen sharply in this delightful town, with its midwinter population of 11,000, and 3,000 students at the University College of Wales. In Cardiganshire the birth rate was 11·8 in 1972 compared with 14·8 for England and Wales, and in Aberystwyth itself the locally adjusted birth rate was exactly half the national figure.

Dr Loraine had said “inflation is the best contraceptive”; Dr Hughes was more specific, stating that high mortgage costs in particular, with an interest rate of 11 per cent at present, were a forceful factor, for both parties of a couple who wish to buy their own home must work as long as possible before starting a family, and then seldom have more than two children.

If the financial disincentive to parenthood is not in itself enough to kill all libido, then the general practitioner has an invaluable role to play in making contraceptive advice not only available on request, but seen to be available on request, as Dr Hughes showed. In addition to displaying a poster in his waiting room, he leaves a prescription pad for the Pill on his desk, facing the patient, and gives her many opportunities to broach the subject, bearing in mind that she may be very shy about raising it herself directly. A complaint of dysmenorrhoea often reveals the true purpose of her visit and, in taking the history from any girl, enquiry into the date of the last menstrual period is a good moment to introduce the topic of contraception. Dr Hughes puts his maternity patients back on the pill one month after they have been delivered.

The Pill is the most popular method of contraception; intrauterine devices are not ideal and have a relatively high failure rate, while in his practice that of the diaphragm is low. The sheath is not popular. Sometimes asked about the postcoital oestrogen pill, his advice is to

avoid it, since there have been recent reports of vaginal carcinoma in babies following its unsuccessful use by the mother.

The general practitioner's role is practical and important. Dr Hughes quoted Brennan and Opit (1973) who found 46 per cent of 1,079 women following childbirth said their pregnancies were unplanned and 47 per cent of those wanting contraceptive advice said they would prefer to get it from their general practitioner.

Abortion is not a method of contraception but it does contribute to population control. It is a necessary corollary to contraception and any civilised country, he said, must have a liberal abortion policy. He himself is very much in favour of our Abortion Act almost entirely as it stands but would like to be able to refer patients for an *immediate* consultation. Vacuum aspiration could be a day-case procedure which junior hospital doctors could carry out. He would like to see abortion on demand ('request' would be better) up to the twelfth week and he sees no conflict with the Hippocratic Oath, as the woman, not the fetus, is his patient. He encourages male sterilisation, having banished any misapprehensions in the man's mind, and female sterilisation too, when the family is complete.

Population control—by whom?

Sir John Peel

The title of the last paper of the day was not intended to have any invidious bearing on the title of the preceding one. Sir John Peel, Past President of the Royal College of Obstetricians and Gynaecologists, stressed the variability of population increase. In some countries it is only half per cent per annum, in others four per cent. Overall it is two per cent. Population projections are inaccurate because there are an enormous number of factors influencing it. We should consider what it is that motivates people to want large or small families.

Meanwhile our priorities are clear cut: we must improve the standards of living in the poorer countries and transfer resources to them. So long as we remain wedded to the concept of growth we shall use up more and more of the world's resources, so we must abandon the worship of material goods. Among the influences on family size are fashion and cultural factors. We should change our attitude to the unmarried woman and we should encourage starting a family at a later age. If the primigravida is below 20, she will have on average 2.88 children, if between 20 and 25, 2.3, and if over 25 at the time of her first confinement, only 2. We must accept the changing pattern of woman in society and her right to work or choose a career. Governments could help by educating the public.

As far as the United Kingdom is concerned, there is no occasion for alarm, and in fact the short-fall effect of the Abortion Laws—to reduce the birth rate—may lead Government to repeal them in a couple of decades or so. The global problem, however, is indeed very serious.

Discussion

In the discussion which followed, Dr Loraine referred to the suggested contribution to poor countries of 0.7 per cent of the GNP as "minuscule", and predicted that no country would advance any policy at the forthcoming United Nations conference in Bucharest to put into force our strong moral imperative to do what we can to help future generations. The consequence of that, said Mr Allen, would be catastrophe. Every civilisation collapses, for the moral promise of society is never borne out by substance. The process will be uncomfortable, as it already is for many people.

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Geigy Scientific Publications

REFERENCE

Brennan M. E. & Opit, L. J. (1973). *British Medical Journal Supplement* 3, 19.
