

The most pressing issue

In the twentieth century, conservative medical attitudes towards family planning were a major force behind the differences in birth and death rates that helped divide the world into developing and developed countries. What role will the medical profession play in the geopolitical divisions of the new millennium?

In 1900, science-based industry and medicine were the prerogative of the West; but in the USA and Europe contraception was an under-the-counter activity or frankly illegal. Abortion was forbidden throughout Christendom. An almost exclusively male medical profession was hostile to family planning. Reproductive physiology hardly existed: no-one had ever seen a fertilized human egg and there were scant scientific data on contraception. Colonial powers were beginning to establish effective public health services in many parts of the world, and infant mortality plummeted as vaccination, clean water and basic public health were introduced. The population explosion was being detonated, but there was not a whisper about family planning.

Between the two World Wars, Western birth rates fell to low levels through a combination of poor-quality contraception, illegal abortion and late marriage preceded by sexual chastity (in women, at least). Probably there was a great deal of individual suffering and many pregnancies were still unintended. Real change began in 1965 when the US Supreme Court overturned laws forbidding contraception and, in 1966, when the British Parliament voted to reform the abortion law. A renaissance occurred in the design of intrauterine devices (IUDs) and the Pill took contraception out of the awkwardness of family planning clinics and into cocktail party conversation. South Korea and Taiwan offered their citizens these new technologies in a pragmatic, unblushing way, backed up by safe abortion. In Korea the total fertility rate (TFR)—the average number of children—declined from 6 in 1960 to 1.7 in 1990.

Family planning programmes elsewhere were not always so straightforward. The Indian Government tried to teach periodic abstinence. Others distributed pills and IUDs but adamantly refused to consider abortion, although there can be little doubt that abortion is an essential part of a successful fertility regulation programme: on average, every woman now alive is likely to have one abortion¹. No country has reached replacement-level fertility without a

great many abortions². Manual vacuum aspiration (MVA) is an appropriate technology that can be applied safely in any primary healthcare centre. Unlike voluntary sterilization, which is often too expensive for a person living on the fringes of the cash economy, MVA is cheap enough to be offered without the need for subsidy. Where abortion remains illegal, much can be done to improve the treatment of women with incomplete abortion, and again MVA has a key role to play³.

Programmes that required clinics failed, predictably, to reach geographically and socially remote populations. Some demographers overlooked the importance of access and condemned the new programmes as wishful thinking⁴. Over the past 30 years medical attitudes may well have held back family planning as much as or more than religious barriers, especially by refusing to delegate simple tasks to non-doctors⁵. For example, in rural India most of the health care for the poor is provided by rural medical practitioners (RMPs), but they are systematically excluded from a role in the family planning programme. RMPs with training could insert IUDs, treat reproductive tract infections or offer early abortion.

Despite shortcomings, national family planning programmes were associated with falling birth rates in many parts of Asia and Latin America⁶. Perhaps the most remarkable case was Bangladesh, where the TFR declined from 6.5 in 1975 to 3.3 today. The education and status of women, which so many people presumed to be a prerequisite of fertility decline, had improved little. What did obtain in Bangladesh families was realistic access to various methods of contraception backed up by 'menstrual regulation'. Abortion remains illegal in Bangladesh, but 10 000 physicians and non-physicians provide MVA of the uterus in the first 8 or 10 weeks after a missed period.

Population growth has great momentum. Even though fertility has fallen in many developing countries, the last billion people were added to the planet in 12 years. India, now with 1 billion people, acquires a million more every 23 days. Delays and differences in access to family planning which emerged a quarter of a century ago will have their greatest influence in our new century. For example, in 1960 Thailand and the Philippines had the same number of people and the same TFR of 6.0. There is no evidence that the Filipinos wanted more children than the Thais, but the religious authorities blunted every family-planning effort and staunchly opposed safe abortion. Today, the TFR of the Philippines is 3.7 while that of Thailand is 2.0. Past mistakes

will cast an ever-darker shadow over the new millennium, and by the year 2025 there will be 73 million in Thailand but 112 million in the Philippines. In the Philippines, large differences in contraceptive use exist by a woman's education. In Thailand, where family planning is easy to obtain, these differentials have evaporated⁷. It is often assumed that uneducated people want large families, but the data suggest that they have more children because they are unable to surmount the hurdles society puts between them and the birth control methods they need.

Those countries that reach replacement-level fertility by about 2010 are likely to move forward economically and socially. Thailand and the other Asian 'tigers' with small families, despite some hiccups in their economies, are likely to prosper, while the Philippines could slide towards the African scenario of economic decline and social instability. The outlook for sub-Saharan Africa, northern India and Pakistan is bleak (Pakistan has only 16% more land area than Texas and in 2050 it will have an unsustainable population of almost 350 million). Growing unemployment, especially among young males, will provide tinder for ignition by political extremists and religious fanatics. The status of women in today's high-fertility countries is almost always inferior to that in low-fertility countries, and if the population gap between the two is allowed to grow it will be women who suffer first. More and more countries with rapid population growth are likely to follow Rwanda into dependence on perpetual gifts of food from the West. Already the élites of Nairobi and Manila live in walled compounds, surrounded by growing slums. Wars are most likely when the population pyramid has a broad base and a high ratio of young males aged 15–29 to older males⁸. What will happen when the combined population of Ethiopia and the Sudan goes from 88 million to almost 145 million in the next 25 years? Will they build dams on the Nile, cutting off water supplies to Egypt as that country's population, in turn, goes from 70 to 96 million? Will more high-fertility countries develop atomic bombs, or manufacture low-cost bacteriological weaponry?

Some groups have suggested that emphasis should not be given to population growth, because it risks blaming women⁹. In fact, improved access to family planning and safe abortion greatly enhances the autonomy of women and reduces deaths from childbirth and abortion, while it accelerates fertility decline—truly a 'win-win' option. The numerous demographic and health surveys conducted since the 1970s provide compelling evidence that couples are having more children than they wish. An estimated 150 million women desire family planning and cannot get it¹⁰.

But, while the small-family nations surge forth economically, a multitude of ecological trouble will arise,

from global warming and destruction of the remaining tropical forests to the emptying of fish from international waters. The greatest challenge will be to move the world to a biologically sustainable economy where we take no more from the environment and put no more out in pollution than Nature's services can handle. We will need clever new technologies coupled with more modest consumption and attention to human numbers. Global population in the year 2100 could reach 15 billion or more or it could be under 10 billion. In the new millennium, the medical profession can make the difference by promoting three strategies:

- Lobby to sustain and expand budgets for family planning in developing countries—in particular, adequate contraceptives supplies
- Delegate most family planning procedures to lower-level providers, on the basis of scientific evidence
- Help society accept the reality of abortion.

If we are active we can help billions of people achieve a better life. If we choose to do nothing, we may bear responsibility for division and violence in a world that fails to adjust human activities to biological limits.

Malcolm Potts

School of Public Health, University of California, Berkeley, CA94720, USA

REFERENCES

- 1 Alan Guttmacher Institute. *Sharing Responsibility: Women, Society and Abortion Worldwide*. New York: AGI, 1999
- 2 Kulczycki A, Potts M, Rosenfield A. Abortion and fertility regulation. *Lancet* 1996;**347**:1663–6
- 3 Greenslade F, *et al*. Post-abortion care: a women's health initiative to combat unsafe abortion. *Adv Abortion Care* 1994;**4**(1)
- 4 Davis K. Population policies: will current programs succeed? *Science* 1967;**158**:730–9
- 5 Black T. Impediments to effective fertility reduction: contraception should be moved out of the hands of doctors. *BMJ* 1999;**319**:932–3
- 6 Potts M. Sex and the birth rate: human biology, demographic change, and access to fertility regulation methods. *Population Devel Rev* 1997;**23**:1–40
- 7 Lee K, Walt G, Lush L, Cleland J. *Population Policies and Programmes: Determinants and Consequences in Eight Developing Countries*. London: London School of Tropical Medicine and Hygiene, 1995
- 8 Mesquida CG, Weiner NI. Human collective aggression: a behavioural ecology perspective. *Ethol Sociobiol* 1996;**17**:247–62
- 9 Hartmann B. *Reproductive Rights and Wrongs: the Global Politics of Population Control and Contraceptive Choice*. New York: Harper and Row, 1987
- 10 Alan Guttmacher Institute. *Hopes and Realities: Closing the Gap Between Women's Aspirations and Their Reproductive Experiences*. New York: AGI, 1995