

Population growth and climate change

Universal access to family planning should be the priority

The world's population now exceeds 6700 million, and humankind's consumption of fossil fuels, fresh water, crops, fish, and forests exceeds supply.¹ These facts are connected. The annual increase in population of about 79 million means that every week an extra 1.5 million people need food and somewhere to live. This amounts to a huge new city each week, somewhere, which destroys wildlife habitats and augments world fossil fuel consumption. Every person born adds to greenhouse gas emissions, and escaping poverty is impossible without these emissions increasing. Resourcing contraception therefore helps to combat climate change, although it is not a substitute for high emitters reducing their per capita emissions. In 1798 Malthus predicted that as the population increased exponentially, shortfalls in food supply would be unavoidable.² A sevenfold increase in the population has led, 210 years later, to unprecedented food shortages, escalating prices, and riots. Until these events Borlaug's "green revolution"³ had seemingly proved Malthus wrong. Yet fertilisers, pesticides, tractors, and transport are dependent on fossil fuels, which apart from being in short supply, exacerbate climate change.^{4 5}

Last year's parliamentary hearings concluded that the United Nation's millennium development goals, including millennium development goal 1—to eradicate extreme poverty and hunger—"will be difficult or impossible to achieve without a renewed focus on, and investment in, family planning."⁶ The number of people now living on less than \$2 (£1; €1.3) a day is about 2 billion,⁶ which is equal to the world's total population when Oxfam was founded in 1942.

It is often assumed that "any quantitative concern for population must be intrinsically coercive."⁷ India in the 1970s polluted the whole concept by adopting coercive means for population "control." China stands similarly accused. But why consider infringing human rights when around half of pregnancies worldwide are unplanned?⁸ Moreover, numerous countries as varied as Costa Rica, Iran, Korea, Sri Lanka, and Thailand halved their total fertility rates primarily through meeting women's unmet fertility needs and choices.⁸

Conventional economic wisdom says that couples in resource poor settings actively plan to have many children to compensate for high child mortality, to provide labour, and to care for parents as they age.⁹ Often with cultural and religious endorsement, those factors enhance the post hoc acceptance of large families. But economists overlook the fact that, everywhere, potentially fertile intercourse is more frequent than the minimum needed for intentional conceptions. Thus, having a large rather than a small family is less of a planned decision than an automatic outcome of human sexuality. Something active needs to be done to separate sex from conception—namely, contraception. But access to contraception is often difficult. Barriers to access for women intrude through lack of empowerment and abuse of their rights by husbands, partners, or mothers in law, or from religious authorities or, regrettably, even contraceptive providers.¹⁰

The evidence is clear within a wide variety of settings that—despite no increase in per capita wealth or other presumed essentials—demand for contraception increases when it becomes available,

accessible, and accompanied by correct information about its appropriateness and safety; when barriers are removed¹⁰; and when the principles of marketing are applied. This is consistent with normal consumer behaviour.^{8 11}

In Iran, where the total fertility rate ("average family size") declined from 5.5 to 2 (replacement level) in just 15 years, all couples must learn about family planning before marriage and contraception is endorsed by the pronouncements of religious leaders.¹¹ The Population Media Centre uses serial radio dramas or "soaps".¹² Audiences learn from decisions that their favourite characters make—such as allowing wives to use contraception to achieve smaller and healthier families. In Rwanda, 57% of new attendees at family planning clinics named the radio drama "Rwanda's Brighter Future" as their reason for attending.¹²

As doctors, we must help to eradicate the many myths and non-evidence based medical rules¹⁰ that often deny women access to family planning. We should advocate for it to be supplied only wisely and compassionately, and for increased investment, which is currently just 10% of that recommended at the UN's Population Conference in Cairo.⁶

The Optimum Population Trust calculates that "each new UK birth will be responsible for 160 times more greenhouse gas emissions . . . than a new birth in Ethiopia."⁸ Should UK doctors break a deafening silence here? "Population" and "family planning" seem taboo words and were notably absent from two *BMJ* editorials on climate change.^{4 5} Although we endorse everything that those editorials recommended, isn't contraception the medical profession's prime contribution for all countries?

Unplanned pregnancy, especially in teenagers,⁸ is a problem for the planet, as well as the individual concerned. But what about planned pregnancies? Should we now explain to UK couples who plan a family that stopping at two children, or at least having one less child than first intended, is the simplest and biggest contribution anyone can make to leaving a habitable planet for our grandchildren?^{8 13} We must not put pressure on people, but by providing information on the population and the environment, and appropriate contraception for everyone (and by their own example), doctors should help to bring family size into the arena of environmental ethics, analogous to avoiding patio heaters and high carbon cars.

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