POPULATION: the forgotten priority

Reducing our consumption of the earth's resources is made more difficult by a burgeoning population, so why is reproductive health struggling for funds? **Rebecca Coombes** reports

Talking about contraception puts Apio Christine Peace, a Ugandan health worker, in a pessimistic mood. Peace, who is currently working for Care International in a refugee camp in the war ravaged north of her country, would like more Ugandan women to be given the means to control their fertility, not least because Uganda has one of the world's fastest growing populations, projected to triple by 2050 to about 103 million citizens.[1] She highlights her concern about Uganda's ability to sustain such a rapid growth in population by pointing out the gradual loss of the country's natural forests. Poor agricultural practices and overpopulation are causing the erosion.

"Part of the forest reserve was recently given over to a soft drinks plant. I just think the government isn't committed to the environment. There is poor provision of family planning services, and so the population is on the increase. Women do want control over their fertility, but many are in circumstances where they don't have a choice. It is still a highly patriarchal society where men dictate how many children a wife has." The average number of children per mother is 6.6 in Uganda, and there are 550 maternal deaths per 100 000 live births. Use of modern contraception remains low, at 18%.[2]

Peace's perspective—that the lack of access to sexual and reproductive health services is a major spur to population growth—is unfortunately not one that attracts the big international aid dollars. In fact, international aid to family planning schemes has shrunk dramatically over the past 15 years. Between 1994 and 2008, funding for reproductive health as a proportion of global health aid dropped from 30% to 12%, according to World Bank analysis. Although actual aid for population and reproductive health increased from $901m in 1995 to $1.9bn in 2007, the increase is small compared with that in the global health budget for aid, which leapt from $2.9bn to $14.1bn during the same period.

Much of this is linked to shifting priorities in the United States under the Bush administration (box). In several countries, including the Dominican Republic, the US has ended funding for family planning. In other areas, the US ring fenced money for HIV, which according to one critic "has created booming, but vertical, programming."

One obvious approach to unlocking more funding for family planning is to improve the links between sexual and reproductive health and HIV/AIDS programmes. Links include improving condom supplies, testing for sexually transmitted diseases, and integrating sexual and reproductive health information and services into HIV/AIDS programmes.

Environmental link

But newer voices are also arguing that sex and reproductive health have a lot to offer people wrestling with climate change. Current UN population projections, if aid for family planning doesn't increase, point towards a world population of 11 billion by 2050,[3] which will inevitably lead to a significant rise in greenhouse gas emissions. So why shouldn't universal access to voluntary family planning services be one response to climate change?

Bob Engelman, an author of the UN Population Fund's annual report on the state of the world population, which this year will focus on climate change and population, agrees. "There is very good emerging research that indicates that population dynamics are incredibly powerful—when you look after future population you get much lower levels of greenhouse gases. That is not surprising; it is intuitive. When you look at the cost of the sort of interventions that might have an impact on population—family planning, provision of contraception, safe abortion, female education—

LIBA TAYLOR/PANOS

Ghana: family planning hostage to US politics

Ghana had one of the first national policies on voluntary family planning in Africa. Since 1988, the use of contraception among married women has doubled to 25.2% and the use of modern methods more than tripled to 18.7%. But in rural areas, contraception use remains low and the fertility rate is high. Half of adolescents aged 12 to 19 live in rural areas and cannot afford contraceptive and family planning services or the journey to the nearest town. The pregnancy rate of young women in rural areas is double that of those living in the city. One in 35 will die during pregnancy or in childbirth.

In 2002, the Planned Parenthood Federation of Ghana distributed more than 6.5 million condoms. This was achieved in part with the help of US taxpayers and a $2.8m grant from USAID. However, in 2004 the Bush administration made funding conditional on agreeing to the so called "global gag rule," preventing doctors and nurses from even talking about abortion options. Abortion is legal in Ghana, and the federation lost $2m in funding because it refused to accept the rule. It also lost USAID donated contraceptive supplies and experienced shortages, with no supplies in some regions. The federation could no longer afford to hand out free contraception to those most in need, and (http://www.panos.co.uk/cache/pcache2/00011626.jpg) condom distribution fell by 40% in less than a year.

President Obama has since reversed the Bush policy, announcing $50m of funding for the UN Population Fund during his first two months in office.

AMR DAISH/REUTERS

Urban sprawl: Cairo, one of the most densely populated capital cities in the world

they are considerably cheaper over the long term than many of the things we would do otherwise.

"There is much less good research on adaptation. The UN population division did research on water scarcity—is it caused by population growth or climate change? They concluded that in Africa population growth is probably more a factor in water scarcity than both predicted or existing climate change."

Nevertheless, it's unlikely that population will be discussed at the forthcoming UN climate change conference in Copenhagen. "If we went to people now, they would say, 'Are you out of your mind, we only have the smallest chance of getting an agreement out of this conference that would be binding and would last. And you want us to talk about population control?' We need to tell them why it is not about population control," Engelman says.

Thoraya A Obaid, executive director of the UN Population Fund, adds: "We need to bring the focus away from multinational industry producing things to mitigate climate change [such as wind turbines] to actually investing in people and changing behaviour."

Limited progress has been made in attempts to access funds from climate change budgets. The National Adaptation Programme of Action (NAPA) scheme, for example, channels funds from Organisation for Economic Cooperation and Development (OECD) member states to developing countries in need of support to adapt to the impact of climate change. Out of the 49 least developed countries that are eligible for funding, 27 are expected to double their population by 2050. But health projects are conspicuous by their absence. Karen Hardee, vice president of Population Action International, says environmental ministries have dominated the NAPA process. "A total of 448 projects have been approved so far in NAPA countries, but there is nothing on family planning. Only 7% of projects related to health, and so far zero projects are funded."

Meanwhile, there is a high unmet need for family planning in those countries hardest hit by the effects of climate change. Among countries in sub-Saharan Africa where data were available, the percentage of women with an unmet need for family planning ranges from 41% in Uganda and Togo, to 13% in Zimbabwe, and 15% in South Africa. The unmet need for effective contraception results in a high proportion of unintended pregnancies.

Countries such as Iran, South Korea, Thailand, and Bangladesh have made huge health gains through investment in family planning schemes. Ashkan Alavi, chief executive of the Family Planning Association in Tehran, points out that in Iran the total fertility rate dropped from 8 to 1.7 in less than two decades. "We now have the only condom manufacturer in the whole of the Middle East," he says. "Key to our success was the strong backing of the religious leadership. Without that support it would never have worked. In Friday prayers they emphasised it is not the quantity of the Muslim nation, but the quality."

"We have the only condom manufacturer in the Middle East" Ashkan Alavi, Tehran

Maternal health

The need to increase funds is not just about containing population growth. In Berlin earlier this month, a conference co-sponsored by the UN Population Fund, attempted to reinvigorate the goal of "universal access to reproductive health." The goal, to be reached by 2015, was set at the 1994 international conference on population and development in Cairo and has since been incorporated into one of the millennium development goals—to reduce maternal mortality by 75% by 2015. It is the goal on which the least progress has been made.

"Cairo is still an unfinished agenda," said Obaid. "Still a woman dies every minute because of pregnancy and complications. There are women who want to plan families but who have no access to contraception. Wider access to contraception is important because the largest numbers of young people in human history are entering reproductive age. If we continue at this speed we will not reach the goals set in Cairo. We need to talk about budget lines.

"An additional dollar invested in voluntary family planning comes back at least four times in saved expenses. It would cost the world only $23bn a year to stop women having unintended pregnancies and dying in childbirth, and to save millions of newborns—this is equal to less than 10 days of global military funding," she said.

But these goals are largely being ignored by funders, despite commitments made at various G8 summits. At the 2007 G8 summit in Germany a pledge was taken to take "concrete steps" to promote knowledge about sexuality and reproductive health, especially to girls. A year later, in Japan, the G8 nations made a similar commitment but crucially no financial guarantees.

Helen Clark, the former prime minister of New Zealand, now head of the United Nations Development Programme, says the time has come to start making links: "Sexual and reproductive health needs to be brought together with population issues and integrated into the development agenda. It impacts on everything we do. As long as 200 million women have an unmet need, they have a reduced chance of breaking out of poverty and finding work." Gill Greer, director general of the International Planned Parenthood Federation, said: "The challenges today are perhaps greater than in 1994, including a world financial crisis, climate change, the HIV/AIDs pandemic, increasing conservatism, and fragmented health systems."

Engelman adds: "I think we need to frame this debate differently, and just say: 'Should women have more children than they want?' If the answer is no, then we should fund interventions to help change the law and culture that effectively force women to have more children than they want. We should also do more research asking what would be the results of intentional fertility, when women are in control of their reproduction. Would it be a world of growing population or a world where the population stabilises and eventually declines? All the evidence points to the latter."

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2 UN Department of Economic and Social Affairs Population Division: *World contraception use 2007*. New York: UN, 2008.
3 UN Population Fund. *New population projections underline the need for voluntary family planning programmes*. Press release, 11 March 2009. www.unfpa.org/public/News/pid/2218.

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See also EDITORIAL, p 645 , LETTERS, p 647, PERSONAL VIEW, p 697

SAFETY ON THE CURRICULUM

WHO wants patient safety to be included from the start of medical education. **Oliver Ellis** reports

Until now, little has been done to educate future doctors about the idea that health care harms patients. The World Health Organization hopes that this will change with the publication of its curriculum guide next year. The new curriculum, currently being piloted, will detail how medical schools should teach patient safety to undergraduate doctors.

The publication builds on growing concerns that medical errors have high human and financial costs. In 2000, the Institute of Medicine's Committee on Quality of Health Care in America found that in the US alone up to 98 000 deaths a year could be attributed to medical error, costing between $17bn (£10bn; €12bn) and $29bn. It concluded that: "The status quo is simply not acceptable and cannot be tolerated any longer."[1]

Despite this, many students have found their training on safety to be wanting: a 2004 survey of American graduates reported that 45% considered their training on quality assurance "insufficient."[2] Since then, medical educators have made several calls for patient safety to be made a focus of undergraduate training. In 2007 the Association of Medical Education in Europe recommended that patient safety should be integrated into the curriculum from the first year,[3] but there have been no international guidelines on what form it should take.

The WHO curriculum is largely based on the Australian Council for Safety and Quality in Health Care's 2005 patient safety education framework, which covers 22 topics on patient safety and is aimed at all workers who deal with patients, from housekeeping staff to hospital managers.[4]

The WHO curriculum identifies 11 areas relevant to improving safety (box).[5] As well as infection control, surgery, and medication, it includes sections on how errors are reported and reducing blame culture; practical ways of analysing mistakes; and a system of investigating the fundamental cause of errors that arise. It is presented as a comprehensive resource for educators containing background information on patient safety as well as a detailed undergraduate curriculum and sample exam questions.

The authors expect that much of the material will be integrated into existing educational modules. Merrilyn Walton, director of patient safety at Sydney Medical School and lead author of the report, says: "Many components can be easily incorporated through further development of existing subjects or topics. Areas such as health law, clinical and medical ethics, and healthcare communication are all appropriate for integration of patient safety concepts and principles."

"Medical students should have some consideration of patient safety about the time that they start to come into contact with patients, which currently is lacking"

She also said that medical schools had been keen so far: "There has been great enthusiasm for the patient safety curriculum. Because it is new, the universities do not have a lot of capacity to develop a curriculum themselves. This guide gives them a leg-up in terms of content and teaching to all levels of undergraduates."

Early promise

Preliminary reactions have been broadly positive. Stefan Lindgren, president of the World Federation for Medical Education, said that the curriculum was a good idea as long as topics were presented in the context of real medical practice. He said that patient safety "is a core attitude and thus needs to be introduced early and then reinforced throughout postgraduate education and continuing professional development."

Tim Crocker-Buqué, chair of the BMA Medical Students Committee, thinks anything that improves patient safety is a good idea. "Medical students should have some consideration of patient safety about the time that they start to come into contact with patients, which currently is lacking." He is more guarded about the practicalities of implementation, however, as he thinks that the curriculum is necessarily unspecific so that it is applicable worldwide. "It depends on the curriculum in that particular medical school. In the UK it needs to be considered and implemented within the current content of the curriculum."

The curriculum is currently being tested at 10 medical schools in different countries. Each school has implemented at least three of the 11 topics and will use focus groups and questionnaires to judge student and staff reactions to the material. According to Benjamin Ellis, the curriculum programme manager for WHO, the schools' reactions have been largely positive. WHO will review the results, along with feedback from other interested parties, in spring 2010; the final document could be published as soon as the end of that year, with curriculums for other healthcare professions shortly following.

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WHO curriculum on patient safety[5]

- What is patient safety?
- What is human factors and why is it important for patient safety?
- Understanding systems and the impact of complexity on patient care
- Being an effective team player
- Understanding and learning from errors
- Understanding and managing clinical risk
- Introduction to quality improvement methods
- Engaging with patients and carers
- Minimising infection through improved infection control
- Patient safety and invasive procedures
- Improving medication safety

Medical schools piloting WHO curriculum

School of Medicine, Cardiff University

University of Aberdeen Medical School

College of Medicine, King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

Sydney Medical School, Australia

Sackler Faculty of Medicine, Tel-Aviv University, Israel

School of Medicine, del Salvador University, Buenos Aires, Argentina

Patan Academy of Health Science, Kathmandu, Nepal

Hawassa University College of Health Science, Faculty of Medicine, Ethiopia

Maulana Azad Medical College, New Delhi, India

Faculty of Medicine, University of Manitoba, Winnipeg, Canada