

EDITORIALS

People and planet: from vicious cycle to virtuous circle

Overpopulation, poverty, and environmental degradation share common solutions

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An expanding population with increasing per capita consumption levels presents a perfect storm for human health and wellbeing. The Royal Society's recent report *People and Planet*¹ summarises the effects that population size, human consumption, and poverty are having on the global systems that support life and make life worth living. The purpose of the report is to stimulate constructive debate and collaborative action while there is still time.

The world's population reached 7 billion in 2011. Developing countries will be building the equivalent of a city of a million people every five days from now until 2050.¹ The impact of a growing population is determined by a combination of its size, its structure, its movement, and its behaviour. The global population is bigger, more urban, and consumes more—especially of natural non-renewable resources—than ever before. The waste from this consumption is equally threatening; although we know much about the burning of fossil fuel—"the biggest global health threat of the 21st century"²—we know little about the health effects of the countless new chemicals we synthesise.

The Royal Society report identifies three priorities for action. Firstly, we need a more systematic approach to stabilising the world's population by lifting 1.3 billion people out of absolute poverty. This means using political leadership and financial commitment to bring reproductive health and voluntary family planning programmes to all, and ensuring that equal numbers of boys and girls access high quality primary and secondary education. This aims to make every child wanted and ensures a welcome into a social, economic, and physical environment worth living in.

Secondly, urbanisation needs to be managed in ways that promote the health and welfare of all, rather than creating the inequalities of gated communities next to shanty towns, with the consequences that has for everyone's security and quality of life.³ The development of early 19th century London demonstrated graphically the effect of unplanned urbanisation on health.

Thirdly, the wealthiest countries urgently need to stabilise and reduce levels of material consumption. The NHS Sustainable Development Unit has shown that the route to a sustainable existence needs three things to happen simultaneously: changes

in behaviour (for individuals and organisations), changes in laws and policies, and the stimulus of technological innovation.⁴

How can this be done? Firstly, a more multidisciplinary system-wide approach is needed to generate the knowledge base. Secondly, better measures of progress should be developed, beyond life expectancy, quality adjusted life years, or gross domestic product—measures that capture the full social and sustainability impact of changes.⁵ Thirdly, better mechanisms of economic development are needed, which are less dependent on endless growth and more aligned with equitable prosperity.⁶ Lastly, better mechanisms of institutional governance are needed to ensure rapid systematic implementation of what works. If we were never to waste a crisis, then the current global financial crisis is surely the best stimulus to develop more appropriate economic systems for a sustainable future.

What can health systems and health professionals do? Most importantly we need to appreciate that the challenges of population growth, consumption, poverty, and environmental degradation are not isolated problems but are connected and have shared solutions. Many actions that improve future global health also deliver more immediate health benefits.⁷ These co-benefits for health happen at three levels. Examples at the level of the individual include eating better, moving better,⁸ improving women's control over their fertility, and using drugs wisely. At a system level models of care should empower patients; deal with long term complex needs; and use modern preventive, therapeutic, and information technologies closer to home. All these can contain cost, improve quality, and reduce inequalities and environmentally wasteful consumption, all of which benefit the system and the patient. Healthcare systems need to aim for better rather than more healthcare, and to measure success not by activity but by how health needs are fairly dealt with and health outcomes consistently improved at similar or lower cost. At a global level health professionals can raise awareness about interventions such as "contraction and convergence,"⁹ which simultaneously tackle global health and the fair redistribution of resources across the world.

These benefits need to be quantified and embedded into our health systems. More interdisciplinary research—from engineers and health professionals to economists, natural scientists, and

social scientists—is needed to work out exactly how we deliver these better systems of prevention and care. We need a better understanding of how complex systems can adapt to a radically different world. That will not come about by continuing to think, act, and research in silos.

These global challenges and opportunities are happening on our watch. They are the cholera and tobacco of our time.¹⁰ In a complex and specialised system health professionals risk losing their broad perspective and their power and mandate for collective advocacy and action. Health professionals and health systems need to act, and to be seen to be acting. To echo the title of the Royal Society's report, it's good for the planet, it's good for the purse, and it's good for patients: not a perfect storm but a positive triple bottom line.

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