

## Out of the Box



Public health, nutrition and public health nutrition, as topics, disciplines and states, are all different from one another; and what and how these are depends on your point of view. This month meditates on public health as the foundation for public health nutrition, and the view is from Hyderabad.

### What are we about?

The 'aims and scope' for this journal, printed in its preliminary pages, do not attempt a definition of public health nutrition. The Barcelona Declaration of the World Public Health Nutrition Association (WPHNA) offers: 'The promotion and maintenance of nutrition-related health and well-being of populations through the organised efforts and informed choices of society'<sup>(1)</sup>. This tries to define public health nutrition not as a topic, but as a discipline – not the same thing.

A new compilation<sup>(2)</sup> has a chapter on 'concepts and guiding principles'. This says that public health nutrition is 'concerned with the nutritional health of populations'. Meaning what? By way of explanation, the chapter refers to a keynote paper by Nevin Scrimshaw in 1995<sup>(3)</sup> which concludes: 'Recognition that so much disease can be prevented or delayed by improved diet and related lifestyle constitutes a new paradigm applicable to the populations of both developing and developed countries'.

Such concepts resonate with current orthodox teaching and practice, which are reflected in most plenary themes of nutrition congresses and the approaches of most original papers in this and other journals. These, perhaps unwittingly, position nutrition science principally as a biological discipline, and even more modestly, position public health nutrition as a branch of nutrition science.

Most public health nutrition teaching and practice follows the line of most nutrition scientists, who are MD PhD. It assumes that 'health' means the absence or prevention of physical diseases – although the term 'well-being' in the WPHNA definition does suggest a broader view. It assumes that interventions made by professionals will resolve the public problem. Are children short of liver and eggs? Give them vitamin A pills. Are adults overweight? Get them on treadmills. Troubled by high rates of dental caries and neural tube defects? Dose water supplies with fluoride and sprinkle folic acid on breakfast cereals. The physician and epidemiologist Paul Farmer, having said that such approaches amount to the

management of social inequalities, goes on to say: 'the limitations of such tinkering are sharp'<sup>(4)</sup>.

Are public health nutritionists not qualified to be aware – for instance – that the 'diet and related lifestyle' of communities in Kabul is largely determined by their city having been bombed to rubble in the last 30 years? Or that the 'diet and related lifestyle' of families who live in the shanty-towns, *favelas* and streets of Johannesburg, Rio de Janeiro and Mumbai is driven by lack of clean water, safe shelter, sanitation, education, employment and hope?

An unusual recent paper in this journal<sup>(5)</sup> may help to explain what I am getting at. It points out that 'the nutrition transition' is driven by power politics and in Africa goes back to the era of slave trading, and calls for solidarity in 'exposing the colonial and neocolonial forces which have undermined food security and health status'. Its tone is similar to that of the 2000 People's Charter for Health agreed at the initial assembly of the People's Health Movement in Savar, Bangladesh<sup>(6)</sup>. This says: 'Health is a social, economic and political issue... Inequality, poverty, exploitation, violence and injustice are at the root of ill-health'.

### What are we doing?

Yes, I know that colleagues now wrestling with definitions of public health nutrition as a topic and discipline agree that what come first are the causes, states and conditions of public health. But before public health nutrition can be defined, and its principles and priorities specified, the definition, principles and priorities of public health, as well as those of nutrition<sup>(7)</sup>, need to be set out. If these are shallow and inconsequential, then nutrition ain't worth a pile of chemically analysed beans.

These thoughts and the remainder of this column have been prompted by Srinath Reddy, a colleague since 2001 when, ensconced above Lake Como, we helped to compile the Bellagio Declaration<sup>(8)</sup>. Professor of cardiology at the All-India Institute of Medical Sciences in New Delhi<sup>(9)</sup>, he is also a worker of wonders. He has liberated \$US 15 million from the Indian Government, matched by the Gates Foundation, and a further \$25 million from Indian philanthropists, to create the Public Health Foundation of India (PHFI), inaugurated by the President of India in 2006. Already the PHFI has assembled a core team of first-class young professionals, and is networked with colleagues throughout and outside India and Asia.

The opening of the first PHFI centre in Hyderabad was marked this August by an invited conference attended by participants from all continents. From Brazil, Srinath summoned me, together with Alvaro Matida, secretary-general of ABRASCO, the national public health organisation. My task was to present on the meaning and purpose of public health.

The conference was also the occasion for the launch in India of the 2007 World Cancer Research Fund/American Institute of Cancer Research report on the prevention of cancer worldwide<sup>(10)</sup>. A masterly presentation by Alan Jackson was made even more auspicious by the presence and support of Dr B. Sesikaran, director of the Indian National Institute of Nutrition.

My first message on public health is: Now is the time for the North to learn from the South. The illustrative slide was a picture taken in Coonoor, where in 1918 Robert McCarrison founded the laboratory that later became the National Institute of Nutrition – now based in Hyderabad. Sir Robert's studies of Indian rats and humans fed different diets convinced him of the crucial importance of whole foods for population health and well-being<sup>(11,12)</sup>. After retirement in 1935 he was one of the architects of the British 1939–1945 wartime agriculture, food and nutrition policy: a pinnacle of public health achievement that enabled the British people to endure until entry of the USA ensured defeat of the Axis powers.

Thus, a public health nutrition lesson learned from India has affected world history. Following Mohandas Gandhi<sup>(13)</sup>, Paulo Freire<sup>(14)</sup> and Wangari Maathai<sup>(15)</sup>, sustained health and well-being begins at personal, family and community level, with awareness of the value of what exists, raised consciousness and mutual belief, respect and confidence.

### What is to be done?

As I researched my presentation<sup>(16)</sup> I recalled the descriptions of the conditions of the under-classes in newly industrialised Europe, which inspired the great mid-19th century public health pioneers. Thus in the 1840s *The Artisan* reported on existence in an English slum<sup>(17)</sup>: 'In this part of the city there are neither sewers nor other drains, nor even privies belonging to the houses. In consequence, all refuse, garbage, and excrements of at least 50,000 persons are thrown into the gutters every night... Water can be had only from the public pumps, and the difficulty of obtaining it naturally fosters all possible filth'.

At much the same time, the social commentator William Cobbett went on his 'rural rides' in England. Reporting on the fate of displaced peasant farmers, he wrote: 'Their dwellings are little more than pig-beds, and their looks indicate that their food is not nearly equal to that of a pig. Their wretched hovels are stuck on little bits of ground on the road side, where the space has been

greater than the road demanded... It seemed as if they had been swept off the fields by a hurricane... And this is "prosperity", is it?"<sup>(18)</sup>

The shock of the 1848 European people's uprisings, following the testimony of William Cobbett, Rudolf Virchow<sup>(19)</sup> and many others, led to the first great period of public health awareness and reform. This emphasised the economic, social (including political) and environmental causes of health and disease. It assembled alliances of bold reformers with visionary industrialists and civil servants, and with other committed professionals such as physicians, engineers, architects, agronomists and economists, all pushed by the growing trade union movement and the real fear of further popular uprisings<sup>(20)</sup>. Plus it focused not so much on treatment of diseases as on general improvement of the fundamental conditions of life and work, correctly believing that this would reduce endemic and epidemic disease.

The European countries that became most successful were those within which ambitious public health reforms gradually transformed population well-being. The water supplies of cities were made safe by comprehensive sewage and water purification systems. Laws and regulations were introduced to provide more light, less pollution, better sanitation, less crowding, secure food supplies, shorter working hours, paid holidays, child care facilities, publicly funded schools, and open spaces and facilities for recreation. You probably enjoy the fruits of these reforms, as do I. Many if not most populations in the South do not, and in many countries many of these conditions are deteriorating.

### Elemental and fundamental needs

With such thoughts in mind, Srinath encouraged a group of us to get together to draft what became an informal statement. We began by setting out what is not always obvious in this time of individualism: 'Public health is a public good. Public health is not only about its profession as a scientific and technical discipline. It is a vast social and political enterprise. Protection and maintenance of public health is one of the prime responsibilities of governments, with other policy makers and opinion shapers'.

We then proposed: 'A global vision seen from countries with lower material resources is different from that from materially rich countries. In the 20th century public health policies and actions have been largely based on the assumption that the welfare of lower-income countries is dependent on support and intervention from higher-income countries, and that in terms not just of money and material resources but also of skills, imagination and planning, the South needs and learns from the North.

'However, it is in lower-income countries that national, professional and community leaders and representatives, and the people themselves, have the most experience in

understanding and influencing the most powerful threats to population health. Many countries in the South are already shaping their own destiny, and of these a substantial number are major global players, shaping the global health environment... Now increasingly it is time for the North to learn. Leaders, representatives and communities in the South have the best knowledge of and insight into their own circumstances'.

We then drafted principles and priorities. Space and publishing etiquette allow me to quote just a sample of the couple of dozen we agreed. Thus, of public health as a state and condition:

- 'People in low-income countries are vulnerable to illness usually not because of lack of money, but because of lack or impoverishment of other resources'.
- 'Elemental needs for the living world of which humans are one part, are for light and heat, and for clear air, clean water, fertile earth, and nourishing food'.
- 'Fundamental human needs also are for safe shelter, nurturing parents, supportive families, primary schooling, rewarding work, and peaceful societies'.
- 'As these needs are increasingly met, well-being of communities and populations will improve, and rates, severity and duration of diseases will decrease'.

We also addressed public health as a discipline:

- 'Public health in this century has ethical and ecological as well as scientific foundations, and is based also on precepts of social justice and human rights'.
- 'Public health is health for all. Its resources must be for the benefit of all populations, and especially the most vulnerable, impoverished and dispossessed'.
- 'Sustained improvements in public health always require use of effective laws and regulations that enable and protect as well as restrict or prohibit'.
- 'As a scientific and technical discipline, public health incorporates related specialist skills that need to be informed by wider social issues to be fully effective'.

We offer this work in progress for development and improvement, and in preparation for the congress of the World Federation of Public Health Associations being held in Istanbul next April (for more details see [www.worldpublichealth2009.org](http://www.worldpublichealth2009.org)).

### What are we saying?

Words, phrases and language itself shape the meaning of what we write, say and think<sup>(21)</sup>. Language embeds ideology. An example occurred in Hyderabad. We drafted: 'Sustained economic and social development and environmental protection, at communal, national and global levels, requires sustenance and maintenance of population health and well-being, and relatively low levels of disability and disease. Correspondingly, bad or deteriorating states of population health, high rates of

death of mothers and children, and high or increasing levels of endemic or epidemic disease, are signs of societal failure'.

This seemed syllable-perfect to me. But Ravi Narayan, a veteran of the People's Health Movement, pointed out that in India 'communal' refers to religious sectarianism, as in 'communal bloodbath'. No use protesting that this is not stated in the *Oxford English Dictionary*! So we substituted 'local'. Now I am busy excising 'communal' in other work.

It's time for a public health lexicon of words and phrases. The title of the Hyderabad conference included the terms 'low- and middle-income countries', which I use more or less as often as 'South' and 'North', but which increasingly feel troublesome. In Greece and Rome, it was 'the civilised world' (us, inside) and slaves and 'the barbarians' (them, captive or outside)<sup>(22)</sup>. Fast forward to the second half of the last century and the ascendancy of economics, and first we had 'developed' (us) and 'undeveloped' (them), and then 'developed' and 'developing'. Identification of development with the average amount of money circulating in a country is absurd, not to say outrageous; so now we have 'low-, middle- and high-income', terms which do at least make clear that the division is in terms of money. But they still imply that money and the material money buys is the measure of progress.

In Hyderabad some presenters used the phrase 'low- and high-resource countries', which after a flirt I feel does not fly, because it still suggests a material hierarchy. So let's be imaginative. How about classifying countries into low, middle and high Olympic medals? Or, thinking of my own native and chosen lands, Olympic cycling and beach volleyball medals? Or, more seriously, low, middle and high rates of murder, prison inmates, bankruptcies, suicides, or tonnage of bombs dropped on other countries, all of which have the added virtue of not associating 'high' with good? Or low, middle and high rates of sustained marriage and family life, literacy, stamps on passports, equity, tolerance, stability, Nobel Literature prizes, or species of butterfly?

Fun or serious national categories ignore the fact that the division of the world into nation states, a European idea consolidated in the late 19th century with the creation of Germany and Italy, and exported to Africa with disastrous results, while enshrined by the UN system, now does not make a lot of sense<sup>(23)</sup>. The division also blurs realities into national averages; fair enough in a few small countries like Denmark and Austria where most people are middle-class, but grossly misleading in countries like Brazil, Russia or the USA, where a small minority are rolling in money and a much larger minority are destitute.

In cultural, educational and ideological as well as material respects, the professional and upper-middle classes in Moscow, London, Sydney, Shanghai, Hyderabad, São Paulo and Chicago have more in common with one

another than they do with communities who live in the slums and backlands of their own countries, or often even with members of their own families who have dropped out and have little contact with the outside world. This is super-evident in the cities of India, which swarm with destitute people. In other cities such as New York, São Paulo and Durban, the police try to keep indigents out of sight downtown, but whenever I go for a run in Hyde Park and Kensington Gardens just after dawn in London, I pass plenty of people sleeping in doorways and on benches.

We may be stuck with the terms low-, middle- and high-income. But let's make clear, in what we say and write, that money by itself can't buy you progress, and that within the boundaries of most countries there is great variety. This column is dedicated to the people of Kerala.

### Acknowledgements

*Sources of funding:* My trip to Hyderabad was paid by World Cancer Research Fund International. My accommodation at one of the Taj group of converted palaces and exquisite built-for-purpose hotels, owned by the Tata conglomerate, was enabled by a grant from the Rockefeller Foundation. The Hyderabad conference was also supported by the Wellcome Trust, the International Development Research Center, WHO and the US Department of Health and Human Services.

*Competing interests:* I am chief editor of the WCRF/AICR report<sup>(10)</sup>. As regularly stated here, I am committed to the precepts of the New Nutrition Science<sup>(7)</sup> whose spiral symbol marks my columns.

*Authorship responsibilities:* As a reviewer of the chapter on concepts and guiding principles in the book on public health nutrition<sup>(2)</sup>, I had fruitful exchanges with its co-editors Mark Lawrence and Tony Worsley. Their characterisation of public health nutrition as driven either by 'socio-ecological' or 'lifestyle' or 'biological' principles, such that the approach to pellagra is either economic recovery, or minimally processed corn, or food fortification with niacin, is on the button. The initial draft of the Southern-orientated statement on public health<sup>(16)</sup> was influenced by many giants including Friedrich Engels, Rudolf Virchow, Mike Davis and Paul Farmer. This became transformed in Hyderabad as teamwork with Ilona Kickbusch, Priyanka Dayiha, Ravi Narayan and Snehendu Kar, and thanks to written and oral comments by Alvaro Matida, Anita Kar, Barry Bloom, David Sanders, Dulita Fernando, Jayaprakash Muliyil, Kavita Sivaramakrishnan, L.N. Nath, N. Devadasan, Nandita Bhan, Neha Madiwala, N.S. Deodhar, Srinath Reddy, Thelma Narayan and Vinayak Prasad.

Geoffrey Cannon  
GeoffreyCannon@aol.com

### References

1. Hughes R (2008) Workforce development: challenges for practice, professionalization and progress. *Public Health Nutr* **11**, 765–767.
2. Lawrence M & Worsley A (editors) (2007) Concepts and guiding principles. In *Public Health Nutrition. From Principles to Practice*, Chapter 1. Crows Nest NSW: Allen and Unwin.
3. Scrimshaw N (1995) The new paradigm of public health nutrition. *Am J Public Health* **85**, 622–624.
4. Farmer P (2005) Health, healing and social justice. In *Pathologies of Power. Health, Human Rights, and the New War on the Poor*, Chapter 5. Los Angeles, CA: University of California Press.
5. Raschke V & Cheema B (2008) Colonisation, the New World Order, and the eradication of traditional food habits in East Africa: historical perspective on the nutrition transition. *Public Health Nutr* **11**, 662–674.
6. People's Health Movement (2000) People's Charter for Health. <http://www.phmovement.org/files/phm-pch-english.pdf> (accessed September 2008).
7. Leitzmann C & Cannon G, (editors) (2005) The New Nutrition Science project. *Public Health Nutr* **6**, 667–804.
8. The Bellagio Declaration (2002) Nutrition and health transition in the developing world: the time to act. *Public Health Nutr* **5**, 279–280.
9. Reddy KS & Katan M (2004) Diet, nutrition and the prevention of hypertension and cardiovascular diseases. *Public Health Nutr* **7**, 167–186.
10. World Cancer Research Fund/American Institute for Cancer Research (2007) *Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective*. Washington DC: AICR.
11. McCarrison R (1953) *Nutrition and Health*. London: Faber and Faber; available at <http://www.mccarrisonsociety.org.uk>
12. Aykroyd W (1953) The nutrition research laboratories, Coonoor. In *The Work of Sir Robert McCarrison*, Prologue [H Sinclair, editor]. London: Faber and Faber.
13. Gandhi M (2007) *An Autobiography. The Story of My Experiments with Truth*. London: Penguin. First published in Gujarati and English, 1927 and 1929.
14. Freire P (1970) *Pedagogy of the Oppressed*. New York: Continuum. First published in Portuguese, 1968.
15. Maathai W (2006) *Unbowed*. New York: Knopf.
16. Cannon G (2008) Public health: moving beyond definitional debates to consensus and collective action. Presented at the International Conference on New Directions for Public Health Education in Low and Middle Income Countries, 12–14 August 2008. New Delhi: Public Health Foundation of India; see also [www.phfi.org](http://www.phfi.org)
17. *The Artisan* (October 1843) quoted in Engels F (1987) *The Condition of the Working Class in England*. London: Penguin. First published in German, 1845.
18. Cobbett W (2001) *Rural Rides*. London: Penguin. First published in 1830.
19. Virchow R (2006) Report on the typhus epidemic in Upper Silesia. *Soc Med* **1**, 11–98. First published in German, 1848.
20. Horne A (1971) *The Terrible Year, The Paris Commune, 1871*. New York: Viking.
21. Whorf B. (1970) Language, mind and reality. In *Language, Thought and Reality*. Cambridge, MA: MIT Press.
22. Foster JB & Clark B (2004) Empire of barbarism. *Monthly Review*, December.
23. Roslings H (2008) Debunking myths about the Third World. TED 2006. <http://www.gapminder.org/video/lectures/> (accessed September 2008).