Editorial: Something new? Or something better?

RICHARD C. CARTER

IF YOU ARE READING THESE words and enjoying access to this journal, the chances are you also have the luxury of ready access to a clean and convenient toilet which safely removes your faeces out of sight via a water seal. Any unsightly or malodorous experiences are only temporary, and most of the time you never think about the destination and final resting place of your transported, treated, and transformed excrement. It is only if your septic tank or sewer – for you are unlikely to be a pit latrine user – fills up or gets blocked that these matters get forced to your attention.

At the same time you (and I, for I am in this happy situation too) are well aware of the several billion who do not enjoy this luxury. We are hot on the statistics of the unserved. We may be able to trot out the wealth distributions of sanitary access across wealth quintiles. We can spout eloquently about open defecation and the importance of ending it.

As those with some knowledge of sanitation programming we can argue the rights and wrongs of subsidies; we know what distinguishes a good Community-Led Total Sanitation (CLTS) facilitator from an ineffective one; we may be experts in the small enterprises which build latrines, supply component parts, or which have the unenviable task of emptying them. Those of us working in particularly challenging situations – high-density slums, places with collapsing soils, near-surface rock or shallow water tables, and areas prone to floods, tropical storms, and earthquakes – have first hand experience, and some solutions, which fit those difficult situations.

We all know that making progress in sanitation requires both technologies which are fit-for-purpose and approaches which can bring about lasting changes in behaviours. Suitable technologies are those which really do safely exclude excreta from the environment, while also preventing flies, other insects, and rodents from carrying pathogens back into people's homes and surroundings. But technologies which are fit-for-purpose must do more than this rather clinical job. They must match the values, aspirations, and pockets of those whom they are to serve. Acceptability of technology is about fit to culture and about form, not only function. Do we really understand what people want from a sanitation 'solution'?

Promotion of rural and urban sanitation in a development context must effectively touch people's values and aspirations, scratching where it itches. For those of us in the business of extending and improving sanitation, this may be primarily a public health issue. For those we are targeting, it most likely is not. We may by now be used to approaches which stimulate in different settings and differing proportions disgust and shame, pride and status. But are we still missing something?

And what about emergencies? In the early stages of disaster response, when new facilities need to be put in place fast, what performance criteria and technical

http://dx.doi.org/10.3362/1756-3488.2016.010, ISSN: 0262-8104 (print) 1756-3488 (online)

options are appropriate? What facilities 'fit' situations in which internally displaced persons (IDPs) or refugees enjoyed good services before they were forced to flee their homes? How can what at first sight is a purely technical problem be solved in a way which takes the human factor into account?

Innovation in sanitation technologies and approaches is needed. But not innovation for the sake of novelty; rather improvements which better fit the needs of the situation, the aspirations of the users, and which deliver wins for both public health and user satisfaction.

Perhaps the urgency to innovate would be greater if those of us who fund, do, or research WASH lost the use of our comfortable toilets for a few weeks every year and had to experience at first hand the deprivations of inadequate sanitation. I suspect that is an experience which would have been welcomed cheerfully by the man to whom this issue of *Waterlines* is dedicated. Dr Jeroen Ensink dedicated his professional life to understanding and ameliorating the conditions of life of the poor. He was unafraid to share the experiences of those whom he worked to benefit, and to ask pointed, difficult, but highly pertinent questions. May his life be an inspiration to the rest of us, and may the papers in this journal continue to reflect the values and goals we share with him.

Richard C. Carter

Obituary

DR JEROEN HERMAN JAN ENSINK

Dr Jeroen HJ Ensink died in December 2015 in tragic circumstances and at an age when he had much more to contribute. He left behind him an impressive legacy of work but he also left a very personal mark on his many colleagues and friends in the water and sanitation sector.

Jeroen had a gentle calm that belied a strong moral conviction and a deeply held belief that universal access to safe water and sanitation was a solvable problem. Throughout his career, he sought to lever science and research to improve the lives of those who in the twenty-first century still live without access to safe drinking water and sanitation. He pursued this goal via different paths – as a practicing public health engineer, as a young field researcher, as a doctoral student, as a senior investigator, and as a teacher and mentor – but always with same clear and practical focus on solving the problem.

He grew up in Zwolle, in the Netherlands, and took great pride in the quiet stoicism and strong work ethic of his countrymen. Although he never returned to live there after the completion of his studies, his love of Dutch football, Dutch beer, and Dutch cheese was never diminished. His knowledge of Dutch sporting prowess was second to none and he was never more animated than when describing such moments as the Dutch football team's defeat of West Germany in the semi-final of the 1988 European Football Championships or Anton Geesink's Judo gold medal in the 1964 Tokyo Olympics.

After completing an MSc in Environmental Engineering at Wageningen University in the Netherlands, he moved to Lahore, Pakistan, to work with the International Water Management Institute (IWMI) as a researcher. Over the course of the next six years, he worked across the South Asia region both implementing *and* evaluating water and sanitation schemes. He developed a great love of Pakistani culture and would speak with fondness of his time there and the many friends he made. Indeed, he was fond of saying, especially to his English friends, that he had a much warmer welcome in Pakistan than he ever received in London.

Whilst still a young researcher at IWMI, and with some urging from his friend and colleague, Dr Peter Jensen, he visited London and decided to knock on the door of an eminent Professor at the London School of Hygiene and Tropical Medicine (LSHTM) with a draft manuscript in hand. To his great surprise, the Professor in question took the time to review the manuscript, and comment in detail, and ultimately

joined the paper as a co-author.[1] This experience encouraged him to apply for a PhD at LSHTM but was also a point of reference for him in his later career as he faced increasing demands on his time from young researchers, whom he always sought to help and support.

His PhD, completed in 2006, addressed the public health problem of wastewater reuse in agriculture in Pakistan. The use of wastewater in agriculture is a classic public health dilemma where trade-offs between complex risks and benefits must first be understood and then carefully weighed.[2] Globally, faecally contaminated wastewater is an important input for agricultural systems on which hundreds of millions of people depend economically and nutritionally. At the same time, the use of wastewater in agriculture carries a public health risk due to its pathogenic nature. Through his PhD, he investigated the association between hookworm ova concentrations in wastewater and the prevalence of hookworm infections among farming families.[3] Characteristically, his careful examination of the problem yielded clear and practical conclusions, published in a number of papers and editorials.[4-6]

After completing his PhD, he joined the Faculty of Infectious and Tropical Diseases at LSHTM as a Research Fellow and steadily rose to the rank of Senior Lecturer. Despite his passionate commitment to teaching, he managed to publish over 50 scientific papers. In the last few years he had developed a broad portfolio of research that spanned an epidemiological evaluation of the impact of improved water supply on cholera in the Democratic Republic of Congo, a multi-country microbiological study to understand pit latrine decomposition processes, and a number of studies with humanitarian agencies to develop more effective WASH interventions in emergency settings.

His greatest passion and talent though lay in teaching and supervising students and young researchers. At LSHTM, Jeroen was a Course Director on the popular Public Health in Developing Countries MSc but also taught on a number of other courses including the Control of Infectious Diseases and Medical Parasitology MSc's and the Diploma in Tropical Nursing. Beyond his own institution, Jeroen was a popular visiting lecturer at a number of other universities including Imperial College, in the UK, Wageningen and the University of Amsterdam, in the Netherlands, and the University of Barcelona, in Spain. His popularity as a lecturer reflected his gift for teaching and a style that was authoritative yet humourous. Audiences were soon won over with opening questions such as 'does eating your own excrement make you sick?' that hooked his students' attention but belied the more serious content to come.

The door of his office was always open and invariably there would be at least one student seated inside and another waiting at the door. Although the students were generally seeking advice, it was rare to hear Jeroen talking at any length. Instead he somehow managed to impart his wisdom through listening with only a few gentle nudges along the way with the result that he helped his students arrive at answers themselves and they left with greater confidence in themselves and a greater passion for their subject. Jeroen took great pride in the publications of his students, and drew most satisfaction from seeing them emerge as independent researchers and publishing their own papers.

It wasn't just his students who benefited from his ever open door and generous spirit. Many of his colleagues were helped and supported in moments of need by an invitation to sit down and have a cup of tea and a slice of cake baked by his wife, Nadja. More than his research and teaching, which provided much inspiration, it will be his warm smile, the twinkle in his eye, and the genuine kindness and respect that he exhibited at all times, that we will miss.

Jeroen leaves behind a much-loved wife, Nadja Ensink-Teich, and young daughter, Fleur Ensink-Teich, and a network of family, friends and colleagues stretching across the world, all of who have been touched and inspired by him.

*This obituary was written by Jeroen's friends and collegues in the Environmental Health Group of the London School of Hygiene and Tropical Medicine.

1. Jensen, P.K., et al., *Domestic transmission routes of pathogens: the problem of in-house contamination of drinking water during storage in developing countries*. Tropical Medicine & International Health, 2002. 7(7): p. 604–609.
2. Ensink, J.H., et al., *A nationwide assessment of wastewater use in Pakistan: An obscure activity or a vitally important one?* Water policy, 2004. 6(3): p. 197–206.
3. Ensink, J.H., *Wastewater quality and the risk of hookworm infection in Pakistani and Indian sewage farmers*. 2006, University of London.
4. Ensink, J.H., et al., *High risk of hookworm infection among wastewater farmers in Pakistan*. Transactions of the Royal Society of Tropical Medicine and Hygiene, 2005. 99(11): p. 809–818.
5. Ensink, J.H., W. van der Hoek, and F.P. Amerasinghe, *Giardia duodenalis infection and wastewater irrigation in Pakistan*. Transactions of the Royal Society of Tropical Medicine and Hygiene, 2006. 100(6): p. 538–542.
6. Ensink, J.H. and W.v.d. Hoek, *Editorial: New international guidelines for wastewater use in agriculture*. Tropical Medicine & International Health, 2007. 12(5): p. 575–577.