The African challenge

Sir—Richard Horton, in his Dec 22/29 news item,[1] evokes many memories of our 4 years working as lecturers at the Komfo Anokye Teaching Hospital, Kumasi, Ghana. As Horton points out, Ghana's healthcare challenges are enormous, as is the case in much of sub-Saharan Africa. In a "cash and carry" healthcare system, many patients have little cash and, therefore, cannot carry. Even disorders as cheap to treat as cerebral malaria commonly present a financial challenge to families. Although there are undoubtedly opportunities for great satisfaction working in such a setting, the daily frustrations for healthcare staff are also huge: lack of infrastructure, facilities, basic equipment and drugs, and sometimes even loss of hope that health care and health outcomes will one day improve. Soaring inflation, a faltering national currency, and inadequate public sector wages fuel an ever present urge for the best and brightest healthcare workers to seek greener pastures abroad. This so-called brain drain is inevitable when local opportunities for postgraduate training, research, and professional development are sorely lacking.

Despite the immensity of the challenges, there are solutions. Although provision of facilities and equipment are certainly needed, a vital part of the solution is investing in key local healthcare staff who are committed to stay and struggle for improved health outcomes and equity. How can child health in Ghana improve if only a handful of Ghanaian doctors have postgraduate qualifications in paediatrics? How can the National Tuberculosis Control Programme succeed if senior staff frequently leave to work for organisations in Europe and the USA? Sadly, much development aid comes in the form of short-term donor-driven programmes that divert the energetic and experienced workers into short-term non-sustainable programmes. These often do little to build capacity within the national health-care system.

This brings the challenge to us. Health-care staff in industrialised countries have access to a wealth of information and opportunities. Although Horton rightly points out the substantial inequalities in healthcare provision that exist between different regions within Ghana, these internal inequalities are less than the huge disparities that exist between industrialised nations and countries in Africa. We can, and indeed must, form partnerships with our colleagues in Africa to help develop clinical, laboratory, and public-health services, and assist in building capacity for research. More opportunities for professional and personal progress would have a positive effect on the satisfaction-frustration balance, empowering nationals to stay, to persevere, and to make solutions work. Improved local opportunities at home may also encourage the return of some of the many African health-care workers currently working abroad.

There are many ways that we in industrialised countries can contribute, including providing access to information and training, equipping laboratory staff, facilitating strategic short-term learning attachments in the UK for healthcare workers, engaging in relevant research activities, and promoting long-term partnerships between academic units. The answers to Africa's health challenges will come from within Africa, but the question for us in richer countries is not whether to be challenged, but how to respond.

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1 Horton R. Ghana: defining the African challenge. *Lancet* 2001; **358:** 2141–49.

Sir—Richard Horton[1] mentions the public-health problem caused by snake bite in the village of Tabale, near Tamale, northern Ghana. Snake bite was the eighth most frequent cause of admission to Bolgatanga Regional Hospital and caused 6% of hospital deaths in 2000. In this region of Ghana in 1999, snake bite led to more than 1100 admissions and 30 deaths in health centres or hospitals. One health centre alone dealt with more than 500 bites (personal communication).

As in many other parts of West Africa's savannah belt, snake bite (mostly from the saw-scaled viper, *Echis ocellatus*) is a serious public-health problem in Ghana. Results of a population-based study in Senegal suggested that yearly mortality is as high as 14 per 100 000 population,[2] and worldwide snake bite mortality has been estimated at 125 000 deaths per year.[3] Many victims of snake bite do not reach formal health-care facilities because of difficulties getting to a hospital, or a preference for traditional treatments.

Research on clinical and epidemiological features of snake bite is neglected in most parts of the world. Snake bites affect mainly the rural poor such as subsistence farmers, therefore they cause social and economic effects as well as being medically important. In Africa, the problem of treating snake bites is compounded by the high cost and scarcity of antivenoms. With the exception of one South African company, all the major manufacturers of antivenom for Africa have suspended or curtailed production. Our experience in Nigeria and Ghana is that many imported antivenoms are inappropriate because they are manufactured with venoms from Indian snakes and do not effectively neutralise venoms of west African species, or control symptoms.

Although it is appropriate to concentrate research efforts on the major diseases affecting Ghana, we must not forget other less-well-recognised but important problems. Research is urgently needed to assess the true burden and economic effect of snake bite, and to improve the development and supply of suitable antivenoms.

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1 Horton R. Ghana: defining the African challenge. *Lancet* 2001 **358:** 2141–49.
2 Trape JF, Pison G, Guyavarch E, Mane Y. High mortality from snakebite in south-eastern Senegal. *Trans R Soc Trop Med Hyg* 2001; **95:** 420–23.
3 Chippaux JP. Snake-bites: appraisal of the global situation. *Bull World Health Organ* 1998; **76:** 515–24.

Sir—Richard Horton's news item[1] contains familiar passages relating to health-care delivery in underprivileged circumstances. He writes of Buruli ulcer, an ulcerative skin disease caused by *Mycobacterium ulcerans*, that is seen in several west African countries, including scattered foci in the southern parts of Ghana.[2,3] Epidemiology and transmission of this disease are poorly understood. During our investigations, we have been led to scattered areas in the southern part of Ghana, where Buruli ulcer affects mainly underprivileged rural people. We witnessed situations similar to those described by Horton in the northern regions: illiteracy, extreme poverty, poor access to health-care facilities, and difficulties in attracting and retaining well-trained healthcare staff.

Epidemiological data have typically been based on hospital records, but we met patients who were not registered at any health-care facility. We realised that

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