

Learning from low income countries

Experience in low income countries should count towards specialist registrar training

EDITOR—Richards and Tumwine ask for discussion on the subject of poor countries making the best teachers.¹ When will the postgraduate tutors and royal colleges recognise that medical experience in developing countries should be counted towards specialist registrar training?

I recently spoke to a specialist registrar whose 12 months in the main teaching hospital in Malawi counted for nothing towards his training. As a specialist registrar training in chest medicine, he will have seen more tuberculosis than most chest physicians working in provincial England will see in a lifetime. This is particularly frustrating as the numbers of cases of tuberculosis are rising progressively in the United Kingdom, and training in the diagnosis and management of this disease needs to be improved as much as possible.

An argument could be made for making training in the developing world compulsory for any doctor who might encounter tuberculosis in his or her clinical practice as a consultant in the United Kingdom. Instead, the powers that decide what is and what is not medical training ignore it completely.

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1 Richards T, Tumwine J. Poor countries make the best teachers: discuss. *BMJ* 2004;329:113-4. (13 November.)

Poor countries still provide reasons to train doctors in diseases of poverty

EDITOR—Poor countries make the best teachers: discuss.¹ Last year a doctor in the United States who had trained in India told me an anecdote that shows the flipside of Byrne's experience on elective as a medical student in India, a learning experience she described as second to none.²

In a lecture during my acquaintance's residency, she noticed that her professor and other residents were puzzled by the x ray film of a boy's limbs. They could not identify what could possibly have been wrong with him. The doctor, who had seen much rickets in India, identified it correctly and to the amazement of her colleagues.

Poor countries, sadly, still provide reasons to train Western doctors in diseases

that may not afflict the West right now but, with mass scale migrations, could easily become a problem in the future.

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1 Richards T, Tumwine J. Poor countries make the best teachers: discuss. *BMJ* 2004;329:113-4. (13 November.)

2 Byrne L. A valuable lesson from India. Electronic response to: poor countries make the best teachers: discuss. *bmj.com* 2004. <http://bmj.bmjournals.com/cgi/eletters/329/7475/1113#85733> (accessed 17 Feb 2005).

Thalassaemia screening in Iran provides evidence for programme in Lancashire

EDITOR—The study reported by Samavat and Modell showed the effectiveness of screening before antenatal care.¹ In Britain, Asian Muslims are at high risk of the β thalassaemia trait, and many marriages are still arranged. In the 1980s, I was part of a team that showed that screening for β thalassaemia trait among Asian Muslim schoolchildren in north Manchester was acceptable to all parents; that most parents intended to arrange marriages for their children; that among those who were arranging marriages, almost all would change the arranged marriage if both partners had the trait; and that termination was acceptable to almost all parents if there was an antenatal diagnosis of β thalassaemia.²

As a result a screening programme for β thalassaemia trait was introduced in north Manchester, although it was stopped in the 1990s, after I left, as it was not considered evidence based. The Iranian study is reassuring in providing evidence. It supports the introduction of screening for β thalassaemia trait for Bury schoolchildren earlier this year.

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1 Samavat A, Modell B. Iranian national thalassaemia screening programme. *BMJ* 2004;329:1134-7. (13 November.)

2 Elton PJ, Baloch K, Evans DIK. The value of screening for beta thalassaemia trait amongst Asian Muslim schoolchildren. *J Reprod Inf Psychol* 1989;7:51-3.

Investing in traditional birth attendants may help reduce mortality in poor countries

EDITOR—Costello et al addressed important issues for poor countries to achieve the millennium development goals.¹ We share their view that community based interventions are crucial to reduce maternal and child mortality by 50% in 2015. In Yemen, the only country with low income and high mortality in the Arabian peninsula, all rural births are home deliveries attended by traditional attendants.

Maternal mortality for Yemen has been estimated at 850/100 000 births.² I recently reported that perinatal characteristics (low birth weight, breech presentation, obstructed labour, and abnormal intrapartum bleeding) in a community health survey and the main walk-in maternal and children hospital in Sana'a city were comparable.³ A 12 year, hospital based study showed that perinatal mortality remained unchanged at 95/1000 births and is probably lower than that in the community.⁴ In 2003, 596 newborn infants who were delivered at home needed special care at this hospital, and 140 (23.5%) died, compared with 177 (16.3%) of the 1089 newborn infants delivered in hospital who needed the same care. Both accounted for 52.5% of the total hospital's child mortality.

Traditional birth attendants live in their communities, which are usually the poorest of the population. Training them about safe delivery and immediate basic care of newborn infants, and instructing them to refer to the nearest essential obstetric care unit if any danger signs become obvious, may prove to be an important, cost effective strategy to reduce maternal and neonatal mortality in communities. They can also contribute in terms of health education and encouraging breast feeding.

The advantage of such training is its sustainability. A trained attendant will train the next family member that takes her position when she retires. Investing in such training should be considered by policy makers and donor agencies.

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- 1 Costello A, Osrin D, Manandhar D. Reducing maternal and neonatal mortality in the poorest communities. *BMJ* 2004;329:1166-8. (13 November.)
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- 4 Banajeh SM, Al-Rabee A, Al-Arashi IM. The burden of perinatal conditions in Yemen: A 12-year hospital-based study. *Eastern Mediterranean Health J* (in press).

Poor patients deserve more science and less advocacy

EDITOR—Hogerzeil, who works for the World Health Organization in Geneva, contends that WHO selects essential medicines within a therapeutic class on the basis of comparative efficacy, safety, and cost.¹ His reference text, *Essential Medicines*,² is at variance with that contention.

WHO's choice to treat 3 million by 2005 is triple dose combination antiretroviral treatment from India. In the April listing, WHO says: "The Committee strongly recommends the use of three or four drug combinations ... The use of fixed dose preparations for these combinations is also recommended, with assured pharmaceutical quality and interchangeability with the single products."

The regulatory test to judge whether a drug is interchangeable is the presence of an originator product. Since none of the patent holders for the three separate originator antiretroviral drugs has produced an equivalent combination product, there is no comparator drug. An analysis of efficacy, safety, and cost has therefore scant scientific merit.

If the WHO system was working as well as Hogerzeil claims, then why have anti-retroviral products that were on the WHO prequalified list been taken off, long after they have been in use throughout the developing world? Of the two Indian companies prequalified to supply combination drugs, one had its product delisted from the WHO list on 4 August 2004 for lack of proof of bioequivalence with the originator product. The other company is under a restriction from the Indian licensing authority to make no reference that the government has approved the drug. In November 2004 two Indian companies voluntarily withdrew their entire portfolio of AIDS drugs from the WHO system.

Of the 12 antiretroviral drugs on the list of essential medicines, five either have been withdrawn by various manufacturers or been taken off the list by WHO. Of the remaining one, four are manufactured only by originator companies.

The lesson here is that poor countries have followed the example of rich countries and voluntarily withdrawn their products—even though the agency that prequalified them failed to take remedial action.

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- 1 Hogerzeil HW. The concept of essential medicines: lessons for rich countries. *BMJ* 2004;329:1169-72. (13 November.)
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Summary of webchat

EDITOR—The question whether or what the developed world can learn from developing countries was not answered as such in the webchat, but the debate was lively.¹

Whether developed countries could learn in terms of misuse or overuse of new technologies and the need to resist commercial pressures was tackled first by trying to identify where the "push" to adopt new technologies comes from in developing countries. Industry was the stimulus for tertiary healthcare organisations that have no public health or primary care focus and no evidence base. Curiosity may be a factor, as were doctors wanting to use new equipment, or even consumers not liking low-tech solutions. Donors also don't necessarily fund the most appropriate, relevant, and evidence based interventions, passively allowing industry to drive the agenda.

Privately funded health care may have a commercial and technological edge over publicly funded care, thus influencing practice in developing countries. The learning process might then go in the opposite direction: developing countries learning from developed ones.

Medical training worldwide could avoid this. Undergraduates might be taught about appropriate evaluation and uses of new technologies, as well as about opportunity cost—when they use one treatment they cannot use another—and those from developed countries would inevitably benefit from working overseas.

Training different types of healthcare professionals for primary care in developing countries was a good idea as traditionally trained, expensive ones may not be the answer. More and better use might be made of local knowledge, but only so long as it withstood rigorous evidence based evaluation. All technologies should be evaluated in the context of where they will be used for cost effectiveness, relevance, and sustainability.

Failures to learn from each other are down to poor information exchange rather than entrenched views and narrow mindsets. The smaller numbers of doctors in developing countries hinder this exchange. The developed world was perceived as needing greater exchange on key issues of public health, global responsibility, and poverty, and should be open to new ways of presenting data. Maybe journals in developed countries perpetuate the problem because they think of their primary readers and so do not pursue issues relevant to developing countries.

Learning from developing countries

Four issues were identified as important to learn from developing countries. Low income countries are developed to different

degrees so have different messages to pass on; they can deliver the best care to patients in difficult situations; they have much clinical material for sharpening clinical skills and for education and research; and they have huge untapped resources of traditional and holistic medicine.

If the developed world focuses on technology, medicine, and evidence it may have some difficulty in learning from developing countries. But if it focused on community action, women's roles in society, and the foundations of health, it could learn a lot.

And study designs are used in developing countries that the developed ones would do well to adopt as research funding becomes tighter and tighter.

How to move forward

Several ideas were floated as the way forward. There should be an ongoing discussion group, and the *BMJ* might consider a series of debates (with syntheses) on topics such as low cost technology, big industry and drug pricing, and relations between democracy and health outcomes.

Another strategy was to publish contrasting global views of "best" management, which could include the developed world's approach to a specific problem and the "best approach" applied in the developing world.

And *bmj.com* could be expanded to include more material for learning from developed countries, or to include more research on infectious diseases in developing countries rather than chronic diseases in developed ones.

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1 Webchat. Learning from low income countries. 18 November 2004. <http://bmj.bmjournals.com/cgi/content/full/329/7476/DC1> (accessed 17 Feb 2005).

More on compulsory registration of clinical trials

GSK has created useful register

EDITOR—The editorial by Abbasi and letters in response illustrate the considerable interest in the registration of clinical trials.^{1,2} As a pharmaceutical company that has created a register to communicate the results of clinical trials of our marketed products, Glaxo-SmithKline would like to bring to your attention the decisions we have taken to make our register worthwhile and meaningful to the medical profession and others with an interest in clinical research.

The GSK Clinical Trial Register is comprehensive: it will include the results from all GSK sponsored clinical trials (phases I-IV) of marketed medicines conducted anywhere in the world. The results include primary and secondary efficacy end points defined in trial protocols, and a summary of adverse events beyond what is traditionally reported in publications. This information is reported

in the format of the International Conference on Harmonisation E3 guideline, a standard that will enable comparison across registers and, in time, possibly be brought together in consolidated registers.

We stand ready and willing to work with others to establish an international register for trials that are initiating patient enrolment, as called for by the International Committee of Medical Journal Editors.³ In the meantime, we have started to register all GSK sponsored patient trials that we initiate on www.clintrials.gov, as we have for trials of serious and life threatening illness. These postings will identify GSK as the sponsor and will include directions for patients interested in becoming trial subjects. We will include the National Library of Medicine number in our results register and scientific publications.

GSK is committed to ensuring that our results register and our posting of trials initiating enrolment are comprehensive. To that end, we are establishing a means of independent compliance assessment of our activities and assembling an international advisory board.

The GSK Clinical Trial Register, along with a description of its operating principles, is available at <http://ctr.gsk.co.uk>.

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- 1 Abbasi K. Compulsory registration of clinical trials. *BMJ* 2004;329:637-8 (18 September).
- 2 Correspondence. Compulsory registration of clinical trials. *BMJ* 2004;329:1043-4. (30 October.)
- 3 Clinical trial registration: a statement from the International Committee of Medical Journal Editors. *JAMA* 2004;292:1363.

Complete clinical trial register is already reality for paediatrics

EDITOR—The issue of trial registration has been considered for years but has only recently become a major issue, as underlined also by the International Committee of Medical Journal Editors (ICMJE) initiative.¹

Although a single, all inclusive, worldwide register would be optimal, areas such as paediatrics need special attention since difficulties in carrying out paediatric studies have led to a lack of drug safety and efficacy knowledge in children.² To facilitate collaborative research and identify areas where paediatric research is needed, the DEC-net international register (www.dec-net.org), supported by the European Union under its Fifth Framework Programme as a three year feasibility study,³ was activated in 2004. DEC-net complies with the criteria listed in the meta-Register of Controlled Trials (<http://controlled-trials.com/mrct>) to allow for future collaboration.

DEC-net fits ICMJE's criteria, is free of charge, and is designed for use by the general public and health professionals. It is different from EMEA's recent EudraCT database (<http://eudract.emea.eu.int>), which

is accessible only to the competent authorities. This major limit will unfortunately, keep it from being directly useful to most researchers and the public.

The US ClinicalTrials.gov is mentioned by the ICMJE group as the only existing register that meets a set list of requirements. DEC-net is different from ClinicalTrials.gov in that it is the only paediatric, population oriented trial register and has been set up to receive trial information from different sources among the scientific and lay community. Abbasi's editorial expressed concern about ClinicalTrials.gov.⁴ The *BMJ* supports the ICMJE policy except for the endorsement of ClinicalTrials.gov, since it offers registration only to specific categories of sponsors. We agree with the editorial. To be at the forefront of such an initiative, a register should have worldwide aims and be designed with the idea, and capacity, to include all possible trials from different countries.⁵

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Pulmonary rehabilitation and readmissions in COPD

Hospital readmissions did not fall

EDITOR—Man et al provide impressive data pertaining to the substantial benefits of early community based pulmonary rehabilitation after hospitalisation for acute exacerbations in patients with chronic obstructive pulmonary disease (COPD).¹

A dissociation is, however, apparent between clinical benefits and hospital readmissions, in which no significant difference for readmissions was observed when usual care was compared with early rehabilitation. The authors state that over the past decade, admissions for COPD exacerbations have soared by 50%, further burdening the NHS. However, their data do not support that early pulmonary rehabilitation would serve to lessen this burden.

Could the authors speculate why the considerable improvements observed in most of the outcome measures failed to

translate into a significant reduction in hospital readmissions?

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- 1 Man WD, Polkey MI, Donaldson N, Gray BJ, Moxham J. Community pulmonary rehabilitation after hospitalisation for acute exacerbations of chronic obstructive pulmonary disease: randomised controlled study. *BMJ* 2004;329:1209-11. (20 November.)

Authors' reply

EDITOR—Lee correctly points out an apparent dissociation between the highly impressive clinical benefits and the non-significant changes in hospital readmission rates. The data presented, however, did show a trend towards both reduced hospital readmission rate and number of hospital days, as well as a significant reduction in visits to accident and emergency departments.

The primary outcomes were changes in exercise capacity and health status, and the study was not adequately powered to look at the secondary outcome measures that included hospital readmission rate.

The British Lung Foundation is currently funding a study powered to look at the effects of early community pulmonary rehabilitation on hospital readmission rates and health economics, and we look forward to presenting these data in the future.

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Childhood deafness poses problems in developing countries

EDITOR—Childhood deafness is an important disorder globally affecting more than 62 million children younger than 15 years. Two thirds reside in developing countries.¹ Although many studies have been reported on the aetiology of deafness, the age/mode of detection and intervention in many developing countries is unknown.

Our questionnaire based study of 363 parents of children attending the only public schools for the deaf in Lagos, Nigeria, with a total enrolment of 429, showed that parents were predominantly (81%) the first to suspect or detect hearing difficulty in their children (table). Parental suspicion occurred mostly at 12-24 months, compared with 8-14 months in developed countries.^{2,3} Only 12% suspected hearing difficulty by age 6 months. The commonest mode of detection

Responses to parental questionnaire (n=363)

Question	No (%)	95% CI
Who first detected or suspected your child's problem (n=357):		
Parent	289 (81)	76.5 to 84.9
Relation	18 (5)	3.1 to 8.0
Neighbour	13 (3)	2.0 to 6.3
Doctor/health worker	31 (9)	6.1 to 12.2
Friend	4 (1)	0.4 to 3.0
Other	2 (1)	1.1 to 2.2
When did you first notice that your child had hearing problem (n=359):		
0 – 6 months	42 (12)	8.7 to 15.6
6 months – 1 year	89 (25)	20.5 to 29.7
1 – 2 years	142 (40)	34.5 to 44.8
2 – 5 years	70 (19)	15.6 to 24.1
After 5 years	16 (4)	2.7 to 7.3
How did you first notice that your child had hearing problem (n=314):		
Failure to respond to sound	153 (49)	43.1 to 54.4
Failure to respond to own name	58 (18)	14.4 to 23.3
Observed speech and language delay	50 (16)	12.2 to 20.6
Observed speech and language defects or unintelligible speech	3 (1)	0.2 to 3.0
Failure to obey simple commands e.g. No, Come, Sit down, Bye-bye etc.	33 (11)	7.4 to 14.6
Other	17 (5)	3.3 to 8.7
What did you first do to help your child (n=315):		
Consulted a medical doctor	243 (77)	72.1 to 81.7
Sought spiritual healing	15 (5)	2.8 to 7.9
Took child to school for the deaf	24 (8)	5.0 to 11.3
Waited to see if the problem would resolve	24 (8)	5.0 to 11.3
Did not know what to do	4 (1)	0.4 to 3.4
Other	5 (1)	0.6 to 3.9
Has your child ever used hearing aids (n=247):		
Yes	49 (20)	15.1 to 25.4
No	198 (80)	74.6 to 84.9

was a child's failure to respond to sound (49%). Speech/language defects or unintelligible speech were least associated with hearing difficulty (1%).

As in developed countries, doctors were most commonly consulted for help (77%). However, most children (80%) were not provided with hearing aids even where appropriate, granted that cochlear implantation was improbable. Parents were often told that their children were "slow starters" and would outgrow the speech delays, only to be enrolled in schools for the deaf when this optimism failed. Ironically, only 6% were so enrolled by age 6 years (mean age of enrolment 10.3 years). This protracted delay especially for the 363 hearing parents may be indicative of their preference for spoken rather than sign language after initial denial and grief.

Screening the hearing of newborn babies allows prompt detection of congenital and early onset deafness, for optimal development of speech and language development.⁴ Until such a programme becomes available, doctors should follow the lead from parental suspicion especially as part of ongoing surveillance to detect children with late onset deafness. The World Health Organization's current initiatives for affordable hearing aids and support services in developing countries should encourage the development of auditory-verbal intervention services.⁵

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The full paper from which this letter is derived is available at <http://bmj.bmjournals.com/cgi/eletters/315/7119/1327/j#95290>

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Branding treatment of children in rural India should be banned

EDITOR—Branding or inflicting burns over the body as a remedy for various illnesses is a harmful practice prevalent in rural India. The common instrument used is a heated metal piece, and the main ailments include pneumonia, jaundice, and convulsions. Children, including neonates, are worst affected by this superstitious practice, which causes serious morbidity and delays in seeking proper medical care.¹⁻³

Many children under 5 years of age who attended the out patient department of Jawaharlal Institute Rural Health Centre at



Branding treatment (reproduced with consent of parent)

Ramanathapuram village in Pondicherry were noted to have scars from branding over the chest. Subsequently, a house to house survey of the entire village was done to study the problem.

Of 144 children under 5 years, 20 had been branded for either pneumonia or convulsions, and eight had been branded prophylactically against pneumonia. All of them belonged to Hindu families, illiterate parents, and families in lower socioeconomic groups.

In depth interviews with the parents of the branded children and discussions in two focus groups including non-formal leaders, youth, and social workers of the village were conducted in the local language (Tamil) about this practice.

All 28 children had been branded by a native healer in another village Ariyankuppam, 10 km away. One of the branding sessions was also witnessed (figure). The people believed that the evil potion comes out through the branding sites, curing the disease. Most of the parents interviewed were also branded in their childhood, and there is a tendency for this practice to be followed through generations.

Inflicting burns on normal children is a non-scientific painful procedure and is unacceptable. The practice of putting saliva and ash or herbal paste on burn wounds adds to the morbidity.

The prevalence of these superstitious practices during a period of advancing medical technology calls for more vigorous efforts for health education and provision of better health services for the rural population. Stringent laws should be enforced to ban this harmful practice.⁴

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