ABSTRACT – The high levels of unemployment among international medical graduates (IMGs) in the UK and the skewed career structure of the NHS may stem from the 1930 withdrawal of General Medical Council recognition for Indian degrees forcing Indian colleges to align more closely with Western medical practices. From 2001 emigration to the UK surged just when UK medical schools were increasing their output. The result was severe unemployment among IMGs. The visa restrictions put in place to correct this make it difficult for IMGs to come to the UK even for short periods of experience. However, the Medical Training Initiative visa category offers an alternative and allows them the opportunity to gain up to two years' UK experience. The NHS has been in debt to IMGs and the countries that trained them since its inception. We must look for new ways to maintain international links and for the NHS to play a positive role in the global health economy.

KEY WORDS: colonialism, international medical graduates, Managed Migration System, Medical Training Initiative, migration, Modernising Medical Careers

Early years

From earliest times physicians have migrated from country to country; some for financial gain, some in pursuit of excellence and some as refugees. Refugees, in particular scientists and doctors, have achieved positions of eminence in the UK and include Nobel Prize winners Chain, Krebs, Katz and Perutz, and well-known names such as Anna and Sigmund Freud and Michael Balint.1 British doctors have also migrated overseas. From its formation in 1599 the East India Company employed British medical officers, often of variable quality and meagrely paid, but marking the first example of significant medical migration.2 In the 18th century, British-trained doctors in charge of hospitals in India first trained Indians in Western medicine and UK-style medical schools opened in Calcutta in 1824 and Madras in 1856 (Fig 1).

Colonial medicine was established to care for the colonists but also brought benefits to the local population in the form of better childbirth and surgical facilities, and better public health measures including sanitation and water supplies. Variolation had been carried out in India since medieval times but vaccination was introduced only four years after its discovery by Edward Jenner.2 Much research was done by British doctors working overseas, by the London and Liverpool Schools of Tropical Medicine, and the Medical Research Council. Missionary medicine thrived during this period of high European imperialism.

Colonialism, however, was a mixed blessing for the health of the local population. Venereal diseases flourished; railways, roads, deforestation and opencast mining reduced drainage and increased the incidence of malaria; dichlorodiphenyltrichloroethance (DDT) entered the food chain; and trading in opium was endorsed on a scale never seen before or since. More recently the Western epidemics of obesity, smoking and physical inactivity have caused sweeping increases...
in the incidence of diabetes and premature heart disease. In addition troops from India and other British colonies encouraged by many to ‘share the responsibilities of the membership of the empire’ were killed in two world wars. Of the 1.3 million Indian troops who fought in the first world war, 64,000 were known to have been killed and countless more injured. The injured were cared for partly by Indian doctors in seven hospitals set up on the south coast of England specifically to look after Indian wounded (Fig 2). Over 4,000 Indian medical officers, nursing sisters and assistant surgeons served in the first world war. Their absence from home would have been of little comfort to those hit by the 1918 influenza pandemic which affected India more than any other country and resulted in an excess of 20 million deaths between 1918 and 1919.  

The 1930s  

After the first world war doctors from the colonies continued to come to the UK but a dispute over General Medical Council (GMC) recognition of Indian medical colleges led to withdrawal of recognition in 1930. This recognition was important; without it Indian graduates were unable to join the Indian Medical Service (IMS) or work in the UK. International recognition was re-negotiated by the Indian Medical Council but the result was that Indian medical schools were forced to align their curricula with Western practice even though such expensive Western-style education was seldom appropriate to the health needs and culture of the majority rural poor. Medical school places increased as an expanding middle class pushed for better education for their children but the medical schools they attended were based on a Western or private model of care. The newly qualified doctors could not fulfil their aspirations locally so emigrated in order to practice the medicine they had been taught and recoup training costs. The migration of doctors (economists call it ‘overflow’) produced still greater migration as students studied medicine specifically to work overseas. Those emigrating learnt skills and aspired to standards of practice in a developed country with different resources, diseases and culture from their home country. If they did return their skills were better honed for private and urban medicine than public or rural health. In 2005 over 60,000 Indian-trained doctors were working overseas. The failure to address the health needs of the rural poor and the subsequent increases in doctors migrating from the Indian subcontinent may be traced to decisions made by the GMC and Indian Medical Council in the 1930s. 

After the formation of the NHS  

The scale of migration both to and from the UK increased after the formation of the NHS in the late 1940s. This was a time of disillusionment with UK medicine. Then (perhaps as now) there was concern about promotion prospects in the UK and many UK doctors emigrated; 7,000 left for the USA, Canada or Australia between 1952 and 1968. The gaps in the service, particularly in general practice and geriatrics, were filled by overseas doctors. In 1968, only 12% of registrars in geriatric medicine were UK trained. Training conditions for international medical graduates (IMGs) were poor. In 1961, Lord Taylor, himself a doctor, addressed the House of Lords:  

_They are here to provide pairs of hands in the rottenest, worst hospitals in the country because there is nobody else to do it….There is no nonsense about teaching in these places. Oh no!...the conditions are very often so bad for the residents that you cannot expect Englishmen to work there. That is a terrible state of affairs._  

The scale of medical migration and concern for the quality of doctors was one factor that led to the 1972 Merrison committee to reform the regulation of the medical profession. There were then 13,300 overseas doctors working in the NHS and 42% of all training grade doctors were from overseas. The report led to the establishment of the Temporary Registration Assessment Board (TRAB), precursor of the Professional and Linguistic Assess-
ments Board (PLAB), to improve language and clinical skills of IMGs.

The Merrison report alluded to but did not tackle the ethical issues at stake, ‘it is not for us to judge the ethics of a service which relies on a substantial supply of doctors from counties which are themselves seriously short of medical services’, but was of the opinion that ‘as the expansion of British medical schools goes forward we shall no longer be so excessively dependent on overseas doctors…’. Medical school places did increase but not enough to compensate for the reduction in junior doctors’ hours from 1970 levels, when 100 hours per week was the norm, and the increased number of female graduates requiring flexible work patterns. The ready availability of overseas doctors allowed a skewed hospital career structure to develop heavily weighted in favour of junior doctors. There were insufficient consultant posts so many IMGs had to settle for sub-consultant career posts. In 2005, 66% of associate specialist and staff grade posts were filled by IMGs, but only 20% of consultant posts (Table 1). Many felt uneasy about the dependence of the UK on IMGs. A conference on migration of medical manpower in 1970 urged recipient countries to train more doctors and to compensate donor countries for the loss of trainees. However, economic and professional factors continued to drive doctors from developing to developed countries, and, as long as UK junior doctor posts were filled, there was little incentive for the UK to train more doctors.

**Unemployment 2001–7**

Until 2001, the number of doctors coming to the UK balanced the available posts. From 2001 to 2007, however, numbers increased markedly (Fig 3). History may judge this the bleakest time in the chronicle of UK medical migration. The increase was driven partly by increased numbers of graduates qualifying from private and government medical schools overseas, partly by the now excellent UK salaries and working conditions, and partly by the 2002 NHS plan which promised ‘net increases of at least 15,000 GPs and consultants’. In response to the increase the GMC announced the opening of a new examination centre capable of examining 1,000 PLAB part 2 candidates a month. This was at a time when UK medical school output was increasing from 3,700 graduates in 1997 to 6,200 in 2006. The result was IMG unemployment on an unprecedented scale. In 2004, IMGs were spending an average of 11.2 months unemployed; by 2005, this had increased to 16 months. Graduates were making 500 applications to obtain a pre-registration house officer post and applicants for one post had wasted a total of 800 ‘doctor years’; wasted in terms of their own professional development and time denied to their home country’s health needs.

The Royal College of Physicians (RCP) led a campaign to reduce the number of doctors coming to the UK with warnings widely publicised in 2005 and 2006 and updates on the number of applicants for different specialties in different regions of the UK. The number of PLAB applicants started to decline but an unexpected development in March 2006 was the Department of Health’s announcement retrospectively withdrawing the visa category of permit free training from IMGs. All IMGs not having

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>% qualified in UK</th>
<th>% qualified in non-UK EEA countries</th>
<th>% qualified outside EEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>28,995</td>
<td>73</td>
<td>7</td>
<td>20</td>
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<tr>
<td>Registrar group</td>
<td>16,979</td>
<td>56</td>
<td>7</td>
<td>37</td>
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<tr>
<td>Senior house officer</td>
<td>20,816</td>
<td>52</td>
<td>4</td>
<td>43</td>
</tr>
<tr>
<td>House officer/foundation year 1</td>
<td>4,618</td>
<td>84</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Associate specialist</td>
<td>2,185</td>
<td>31</td>
<td>5</td>
<td>64</td>
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<tr>
<td>Staff grade</td>
<td>4,816</td>
<td>23</td>
<td>9</td>
<td>68</td>
</tr>
<tr>
<td>Clinical assistant and other</td>
<td>1,238</td>
<td>67</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>All staff</td>
<td>79,646</td>
<td>60</td>
<td>6</td>
<td>34</td>
</tr>
</tbody>
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EEA = European Economic Area.

**Fig 3. Numbers of international medical graduates passing the first and second parts of the Professional and Linguistic Assessments Board (PLAB) examination between 2000 and 2007.** (2007 total projected from January to June 2007 figures). Figures courtesy of Registration Directorate, General Medical Council.
'leave to remain' (for most this would be a dependant's visa or Highly Skilled Migrant Programme (HSMP) visa) would need a work permit to be appointed to a training post. A work permit would not be issued if any UK or European Economic Area (EEA) resident or doctor with 'leave to remain' satisfied the person specification for that post regardless of merit. Applied prospectively, this would be a fitting if harsh way to protect posts for UK (and EEA graduates) and discourage IMGs from coming to the UK. Applied retrospectively it resulted in great hardship to IMGs with many having to leave the country even though half way through their training and postgraduate exams. It was disappointing that no period of grace was offered to those who had already served the NHS in junior grades. The British Association of Physicians of Indian Origin (BAPIO) appealed against the DH's ruling. The ruling would retrospectively alter employment rights for HSMP holders forbidding their appointment to training posts if any UK/EEA resident or graduate with 'leave to remain' applied, regardless of merit. BAPIO's appeal was rejected in the High Court but upheld by the Court of Appeal and, in April 2008, also by the House of Lords. The ruling only applies to those granted HSMP visas before February 2008. For those applying after February 2008, the Home Office February 6th ruling applies. This prospectively disallows holders of Tier 1 of the points-based system (which will replace HSMP) from being appointed to training posts if any UK/EEA graduate or graduate with 'leave to remain' apply. The ruling will discourage IMGs from coming to the UK; a principle to be welcomed when there is such pressure on UK training posts. However IMGs can still apply for non-training service posts as well as any unfilled training posts. The number of service posts will increase when the 48-hour week starts in 2009 making it important to guard against a repeat of the two-tier career structure of previous years when IMGs, no matter how able, cannot progress from non-training service posts.

The future

The DH ruling on work permits, the increase in UK medial school output, the inflexibility of Modernising Medical Careers, and the influx of doctors from the new EEA accession states now makes it very difficult for IMGs to receive any training in the UK even if their intention is to return to practice in their home country. In the first eight months of 2007 alone 995 EEA graduates registered with the GMC. How best should Britain help international graduates in the context of global health needs?

The 2007 Crisp report focused on these obligations. The report encouraged UK doctors to work in developing countries and trusts and deans to facilitate this professionally and economically. Such work would develop the links which some trusts have and build on the Tropical Health and Education Trust's work in linking African institutions with UK counterparts in long-term partnerships. The imbalance between health provision (some argue over provision) in the West and health needs in less developed countries are compellingly portrayed in the Crisp report and echoed in the World Health Authority World health report 2006. NHS Scotland has already formed a partnership with Voluntary Service Overseas (VSO) to give those with at least three years experience (and up to the age of 75) a chance to work in Africa for two years and keep pension and employment benefits intact and in March 2008, on the 30th anniversary of VSO, the DH announced a similar £13 million scheme in England. The RCP, through the International Office and the Education Department, has piloted a general medicine course in India, led by Parveen Kumar, and the Federation of Royal Colleges of Physicians of the United Kingdom opened a PACES exam centre in India in 2007. The PACES exam, with its focus on low-cost skills of history taking, examination and communication is ideally suited for resource-poor countries.

Overseas doctors must also come to the UK to learn from us, and we from them. The RCP hosts international bursaries for young physicians from low and lower-middle income countries for successful applicants to attend an RCP conference in the UK together with a two-week study visit to a relevant specialist unit. Following withdrawal of permit-free training, the DH and Home Office established in September 2006 a new work permit within the Training and Work Experience Scheme (TWES), called Medical Training Initiatives (MTIs) (Box 1).
By July 2007, 53 MTIs had been approved.23 Trusts and consultants should be encouraged to accept MTIs (and their replacements) which will come under Tier 5 of the Managed Migration System. They will keep alive the tradition of overseas exchanges and will benefit trusts as MTIs may do on-call duties. At junior level, MTIs could offer ideal training posts for royal college exams and at senior level be tailored to offer two-year posts to suit graduate's needs to acquire specific skills.

The Crisp report emphasises that exchanges will help the NHS put its own health needs into perspective and 'will broaden the education of health professionals and stand the UK in good stead in a changing and dangerous world.'18

The World health report 2006 paints a bleak picture; 57 countries, 36 in sub-Saharan Africa are unable to meet basic standards of healthcare.20 The World Health Organization estimates it will take an additional 2.4 million physicians nurses and midwives to meet their needs. Training and employment would cost $447 million per country per year; far beyond the reach of those concerned and unachievable in the short to medium term.20 The emphasis, which has been stressed in previous articles in this series, must be on revitalising primary care with a move away from single health issues to supporting all aspects of delivery of and access to healthcare.

It is right that we have moved away from our post-war period of dependence on overseas doctors; and right that we have put behind us the era of IMG unemployment. We are entering a third age, an age traditionally associated with wisdom and understanding. JRR Tolkien's third age in The Lord of the Rings tells of temptation, altruism and heroism with good triumphing over evil. Our aspirations for IMGs and global healthcare must be no less.

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