Effects of Using International Medical Graduates & Professionals in the US: An International Perspective

Onyebuchi A. Arah
Academic Medical Center
University of Amsterdam, the Netherlands &
UCLA School of Public Health, Los Angeles

XIVth Annual Princeton Conference
May 24, 2007
The Problem

WORKING TOGETHER FOR HEALTH

GIVE US YOUR BEST AND BRIGHTEST

THE FLIGHT OF THE CREATIVE CLASS

THE NEW ENGLAND JOURNAL OF MEDICINE

SPECIAL ARTICLE

Medical migration and inequity of health care

For the first time in history, we have the knowledge and resources to overcome the threats to global health equity.
Global shortage of health-workers: 2.4 million needed in some 57 countries (WHO 2006)

The West draws a quarter or more of its workforce needs from developing countries

These developing countries never had enough to start with

The US like the rest of the West can ‘afford’ their shortages, but the developing countries cannot

Largely intuitive but unquantified or unquantifiable effects on developing countries
The ‘Demand’ for IMGs in the US

- What would the US do without the international medical graduates (IMGs)? A nation so dependent... that IMGs make up more than a quarter of its physician workforce.

- This proportion is even higher in many states; in some 15 states IMGs make up 25% or more of their workforce.

- US imports more than twice the number of physicians working in Africa.
IMGs Across US States

Data: NY CHWS, New York, 2006
IMGs Within States: New York State

• NY city: IMGs 40% of active patient care physicians
  • Bronx 44%
  • Kings 59%
  • Queens 59%
• Central NY: 22% (Cortland: 0%)
• Long Island 33%
• Hudson Valley: 35%
• Mohawk Valley: 41% (Herkimer: 59%)

Data: NY CHWS, New York, 2005 Survey
## IMGs in Specialties: NY State

<table>
<thead>
<tr>
<th>Specialties</th>
<th>% IMGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Medicine/Rehab</td>
<td>52</td>
</tr>
<tr>
<td>Pathology</td>
<td>52</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>49</td>
</tr>
<tr>
<td>General Internal Medicine</td>
<td>48</td>
</tr>
<tr>
<td>Critical Care</td>
<td>48</td>
</tr>
<tr>
<td>General Pediatrics</td>
<td>46</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>41</td>
</tr>
<tr>
<td>Nephrology</td>
<td>41</td>
</tr>
<tr>
<td>General Surgery</td>
<td>39</td>
</tr>
</tbody>
</table>
These health-workers come from Europe, the Americas, South East Asia, East Mediterranean, and Africa.

Proportionate migration of physicians and nurses alike from same countries.

Although flow is from poor to rich, among poor source countries, those with higher capacities are also losing relatively more: poor → rich → richer → richest domino or carousel effect.

Different metrics: absolute numbers, emigration fraction, migration density, increase in population-to-health-worker ratio.
Leaky bucket? Get a bigger leaky bucket!

Source: Arah et al. AJPH 2007 (in press)
• 19% of African-born physicians work in UK, US, Canada, Australia, France, Portugal, Belgium, and Spain combined
• 5% of IMGs in the US from Sub-Saharan Africa
US and UK are primary destinations for African nurses, mostly coming from Sub-Saharan Africa.
<table>
<thead>
<tr>
<th>Country</th>
<th>$66,000 per doctor: 25 years and 5% interest</th>
<th>25 years and 15% interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana ($59 billion)</td>
<td>$190 million</td>
<td>$1.9 billion</td>
</tr>
<tr>
<td>Nigeria ($188 billion)</td>
<td>$560 million</td>
<td>$5.5 billion</td>
</tr>
<tr>
<td>South Africa ($576 billion)</td>
<td>$436 million</td>
<td>$4.2 billion</td>
</tr>
<tr>
<td>Egypt ($328 billion)</td>
<td>$856 million</td>
<td>$8.3 billion</td>
</tr>
<tr>
<td>AFRICAN continent</td>
<td>$2.9 billion</td>
<td>$27.9 billion</td>
</tr>
</tbody>
</table>
Migration Reversal: Maternal Health Gains

- Simple econometric model (invoking causal assumptions) where
  \[ \frac{\delta[\text{LN(maternal mortality)}]}{\delta[\text{LN(physician density)}]} \]
  = negative coefficient (e.g. -0.371)
  and everything else (incredibly) held constant

- Percentage decrease in maternal mortality in
  - Algeria 26
  - Angola 13
  - Botswana 56
  - Ghana 20
  - Nigeria 52
  - Sudan 53
  - S. Africa 44
Negative Effects on Source Countries

- Lack of care providers and increased burden of care for those left behind who also leave
- Loss of trainers and teachers
- Loss of skill mix in health care and society
- Increased costs of providing care and bigger leaky buckets
- Economic impact and loss of investment
- Health policy fatigue
- Impact on overall human development
- Unappreciated threat to countries in transition
- Disruption of families and personal ties
Searching for Solutions

- Unilateral national policies futile: global problem, fuelled by globalization, calls for paradigm shift in health-workforce policies
- Migration reversal within healthcare alone problematic
- Urgent dialog among all stakeholders
- Curbing or cessation of active recruitment: allow for ethical passive/personal movement
- Global committee to investigate the real social and health system causes of migration (push factors) and Western reliance on IMGs (pull factors)
- Focus on push factors
International health-workforce investments training, sustainability, retention and performance

Coupling to social progress
- Increased wages and working conditions without overall social, governance and safety progress will fail

Investment in detailed workforce data
- Still no detailed analysis of causes, consequences and solution prospects of migration: combining individual versus societal factors as well as source versus destination countries factors

International medical and nursing schools pairing, exchange and mentorship programs to instil professional satisfaction and perhaps demystify the western lure early on in training
Dually beneficial, ethical interventions to manage migration from a global perspective:

- The West becoming more self-reliant
- Focused residency support for developing countries
- Tailored residencies and global health fellowships funded by governments, NGOs and philanthropists in exchange for home service
- Dedicated funding for those residents with plans to return, with global health research potentials
- Training of medical educators, residency directors and IMGs interested in academic careers
- Framework for quality control, dual licensure and dual appointments of US trained IMGs; built into residency plans from outset
“The solutions to the problem[s] raised by these international [health-worker] movements are not to be found within the movements themselves but in necessary changes within the framework or specific national (health care) systems and, of course, the social, political and class structures in which they exist.”

- Oscar Gish

(Soc Sci Med 1979)
Contact:
**Onyebuchi A. Arah**, MD, DSc, MPH, PhD
Department of Social Medicine
Academic Medical Center, University of Amsterdam
PO Box 22700, Amsterdam 1100 DE, Netherlands
&
Department of Epidemiology
UCLA School of Public Health
Box 951772, Los Angeles, CA 90095-1772
Telephone: +31 20 566 5049; +1 310 721 1895
E-mail: o.a.arah@amc.uva.nl
arah@ucla.edu