Emmanuel B. John, PT, PhD
Associate Professor & Director, Motor Control & Neuromuscular Performance Laboratory,
Department of Physical Therapy, Radford University, Roanoke, VA, USA; Chair Stroke Interest Group, Neurology Section of the American Physical Therapy Association

Keynote Address during the 10th WCPT Africa Region Conference, Lusaka, Zambia, May 19-23, 2014
Definitions

- **Advocacy:**
  - Public support for or recommendation of a particular cause or policy
  - The act of pleading for, supporting, or recommending;

- **Action:**
  - The fact or process of doing something, typically to achieve an aim
Definitions

- **Non-Communicable Diseases:**
  - Chronic conditions that do not result from an (acute) infectious process and hence are “not communicable.”
  - A disease that has a prolonged course, that does not resolve spontaneously, and for which a complete cure is rarely achieved.
    - McKenna, et al, 1998
Non-Communicable Diseases (NCD)

- The US Centers for Disease Control (CDC) suggested four major/classes of NCD
  - Cardiovascular
  - Diabetes
  - Cancer
  - Chronic Respiratory
Non-Communicable Diseases (NCD)

- As physiotherapists, what actions need be taken against NCD in Africa?

- Answers:
  - Produce more physiotherapists
  - Upgrade the knowledge and skills of current physiotherapists
Africa’s Burden of Disease

- Developing countries carry over 55% of the global burden of disease, but have <15% of global health care work force

- In contrast, many developed countries carry a lower global burden of disease, but have a relatively higher ratio of the global health care work force

- The World Health Report 2006
Africa’s Burden of Disease

- Examples
  - The United States carries 10% of the global burden of disease, but commands 25% of the global health care work force
  
  - Africa carries 25% of the global burden of disease, has < 4% of the global health care work force
    - The World Health Report 2006
Africa’s Health Workforce

- Global health care work force imbalance

- Exacerbated by health care work force migration ('brain-drain') from resource poor to resource rich countries
  - The World Health Report 2006
Africa’s Health Workforce

- Many African countries are without PT education
- Many African nations without PTs or very few PTs
- Some African nations with PT Education are falling behind in Education and curriculum advancement
- Some African PT Education programs are still at Diploma (Associate degree) level
Africa’s Physiotherapy Workforce

- Africa has 892 million people in 47 countries
  - WHO, 2014

- Africa has only ~6,200 currently active physiotherapists
  - WCPT, 2014

- This implies one physiotherapist to 143,871 Africans
### Africa’s Physiotherapy Workforce

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameroon</td>
<td>82</td>
</tr>
<tr>
<td>Egypt</td>
<td>650</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>84</td>
</tr>
<tr>
<td>Ghana</td>
<td>121</td>
</tr>
<tr>
<td>Kenya</td>
<td>420</td>
</tr>
<tr>
<td>Malawi</td>
<td>31</td>
</tr>
<tr>
<td>Mauritius</td>
<td>48</td>
</tr>
<tr>
<td>Namibia</td>
<td>98</td>
</tr>
<tr>
<td>Nigeria</td>
<td>650</td>
</tr>
<tr>
<td>Rwanda</td>
<td>160</td>
</tr>
<tr>
<td>South Africa</td>
<td>3532</td>
</tr>
<tr>
<td>Swaziland</td>
<td>20</td>
</tr>
<tr>
<td>Tanzania</td>
<td>40</td>
</tr>
<tr>
<td>Togo</td>
<td>0</td>
</tr>
<tr>
<td>Uganda</td>
<td>50</td>
</tr>
<tr>
<td>Zambia</td>
<td>167</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6200</td>
</tr>
</tbody>
</table>

Source: WCPT, 2014
Africa’s Physiotherapy Workforce

What needs to be done???

- Establish at least one (1) Physiotherapist Education Program in every African nation where none currently exist

- Unified Physiotherapist Education Curriculum in all African Countries
  - Replace all Diploma Programs with a minimum of Bachelors degree programs
  - Encourage and Support Countries desirous of MPT or DPT entry level Physiotherapist Education programs

- Encourage and Support Specialization in Physiotherapy
Africa’s Physiotherapy Workforce: An Action Plan – Proposals to be Executed

- What needs to be done???
Africa Physiotherapy Vision 2020

- Replace all Diploma Program with a Minimum of Bachelors Program

- Establish Diploma to Bachelor degree Bridge Programs for African Physiotherapists currently Diploma holders

- Upgrade Bachelor Program of African Nations who are Ready for it to the Doctor of Physiotherapy entry-level degree program
Africa Physiotherapy Vision 2020

- Action Plan for APV 2020:
  - Inaugurating today the:
    - “Africa Physiotherapy Network” [www.africaphysio.net]
      - Individual and Institutional African Physiotherapists database
    - “Adopt-a-Physiotherapist” Program
      - Individual Mentor-Mentee Program
    - “Adopt-a-Physiotherapist Education Program” Project
      - Institutional Mentor-Mentee program
In 1999, I founded the Nigeria Physiotherapy Network

The NPN has been able to significantly help Nigeria Education and Practice:

- Brought to Nigeria a Doctor of Physiotherapy program
- Instituted a Giving-Back program to help Nigerian PT programs
- Facilitated Faculty and Student Exchange programs
- Created a database of Nigerian PTs spread across the globe and keep them connected to/with Nigeria
- Through a US Based Nigerian owned ICEN, over 600 Nigerian PT had CPD; 11 Spine Certified PTs, etc
- We are changing Nigeria Physiotherapy Education and Practice, one PT at a time
Action Plan for APV 2020:

- Inaugurating today the:
  - “Africa Physiotherapy Network” [www.africaphysio.net](http://www.africaphysio.net)
    - Individual and Institutional African Physiotherapists database

- The APN website will be up by Friday, June 1, 2014 last day of conference. Email: [ebjohn@africaphysio.net](mailto:ebjohn@africaphysio.net)

- Physiotherapists and Institutions can sign up for the purposes of being matched for the Mentor-Mentor Program
Africa Physiotherapy Vision 2020

- How are we going to achieve this in 6 years????

- Well…..
  - I am a believer!
  - I see possibilities
  - Where there is a will, there will always be a way!

- Let take a look at the Nigerian Experience……
At WCPTA Congress in Ghana 2010. We proposed collaboration between Nigeria and US PT Programs on a tDPT program

- There was a lot of skepticism; some said it was impossible given the African situation
- We believed otherwise. We believe in Africa!

Here is the results:
- Over 50 Nigerians applied for UMFlint, tDPT program
- About 35 were admitted into the program
- 11 have graduated with their DPT, another 3 by Dec 2014
- Others are in different phases of the 2 year program
- 1 was dismissed for academic performance
Africa Physiotherapy Vision 2030

- By the year 2030; > 80% of all Physiotherapist Entry level Education programs should be at the Doctor of physiotherapy degree Entry-Level

- African Physiotherapist must have developed skills and knowledge base sufficient as first contact providers

- That is some 14 years away. ...We can do it!
Africa Physiotherapy Visions 2020 and 2030

- Discussions
Upgrading curriculum in Nigeria of existing PT Education programs

- **Nigeria-Michigan Model**
  - PT Education program started in Nigeria in the 1940s with 2 British PTs starting an Assistant PT training program in Lagos after the WWII
  - Some of the PTAs further trained in Britain to become CSPs, returned and practiced in Nigeria
  - In 1966, 1st BSPT program started in Nigeria at the University of Ibadan, 1971/1980 at the University of Lagos, OAU in 1978
Upgrading curricular of existing PT Education programs

- Nigeria-Michigan Model
  - Total of 7 PT Education programs now exists in Nigeria, others being UNEC, BUK, UNIMAID, NAU. Few others on drawing board
  - Nigeria suffered PTs brain drain in late 1980s, early 1990 and till now
  - PT practice and foundation Education programs were threatened
  - Nigeria PTs desire curricular upgrade to DPT
Upgrading curricular of existing PT Education programs

- Nigeria-Michigan Model
  - Nigeria Physiotherapy network worked with University of Michigan-Flint, USA to start an online tDPT program for Nigerian PTs
  - 16 PTs enrolled in 1st cohort in 2011
  - Another cohort to commence in 2012
    - Technological challenges, NEPA!!!!, etc
  - UM-Flint sets up a MOU with NAU, Nigeria for student and Faculty exchange and will provide mentorship to pilot the 1st Nigerian DPT program
Upgrading curricular of existing PT Education programs

- **Nigeria-Michigan Model**
  - This case study is an example of brain-drain turned to brain-gain

- Nigeria PTs who emigrated to the USA, now giving back by helping their country set up alliances and partnerships through the Nigeria Physiotherapy Network
Summary and Conclusions

- We can move Physiotherapy education forward in Africa by forming partnerships and alliances within and outside Africa.

- We need not wait for big grants or big country donors, we can start with individual connections, that can then lead to institutional and country cooperations.
Further Reading


Downloads: