# Establishing and Upgrading African Physiotherapy Education through - Collaborative Partnerships with Resource Rich Countries

Emmanuel B. John, BSPT, PhD Associate Professor Department of Physical Therapy Radford University, Roanoke, VA, USA

### Plenary Session Objectives

- At the end of this presentation, the audience will be able to
  - Understand resource richness or poorness
  - Appreciate need for constant African PT Education and curricular changes
  - Understand various models for setting up collaborative partnerships for moving Physiotherapy Education forward in Africa

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

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

#### **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

#### 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

#### **Resources: Definition**

 An economic or productive factor required to accomplish an activity, or as means to undertake an enterprise and achieve desired outcome

#### Types of Resources

- Three most basic resources are:
  - Land, labor, and capital

- Other forms of resources:
  - Energy, entrepreneurship, information, expertise, management, time, etc.

#### Resources Richness or Poorness is relative

- Resources to consider:
  - Human capital
  - Infrastructure
  - Technological know-how
- Developing Nations vs Developed nation
- Resource Rich vs Resource Poor

#### Resource Richness or Poorness

#### Resources Richness or Poorness is relative

- Resource richness is not exactly developed vs developing nations
- It simply means, having a type of resource (eg, human capital, technology, infrastructure, etc) more than others
- Developed Nations are rich in all kinds/types of resources; i.e. they've developed all their resources!
- Developing nations may be poor in all types of resources or may be rich in some, poor in others

 To address this disparity and perennial health care work force shortage, efforts by the

- WHO and governments in developed and developing countries primarily focus on training, retention, and recruitment of health care professionals in:
  - Medicine, nursing, pharmacy, dentistry, imaging, and medical laboratory sciences

For instance, education and training specific to medical and nursing health care professionals in sub-Sahara African countries have received a tremendous boost in funding, human and material resources, and partnerships with many US, Canada and EU countries and academic institutions

 Some of these initiatives are driven by HIV/AIDS funding

- Example of funding to improve medical and nursing education in Sub-Sahara Africa:
  - The US government provided funding through:
    - The Medical Education Partnership Initiative (MEPI) and the Nursing Education Partnership Initiative (NEPI) programs of the National Institutes of Health (NIH) and the US President's Emergency Plan for AIDS Relief

- Specifically, successful upgrading of nursing education programs through NEPI have been reported for Botswana, Lesotho, Kenya, Malawi, Zambia, Brazil, India, Thailand, and the Philippines
- No evidence exist that education of physiotherapy and other rehabilitation health care professionals received attention or funding!

Implication: Physiotherapists education is not yet a funding priority of resource rich countries!

Paucity of donor nations and institutions to help invest in Physiotherapy education in Africa leaves:

- Many African countries without PT education
- Many African nation without PTs or very few PTs
- Some Africa nation with PT Education are falling behind in Education and curriculum advancement

- The paucity of donor vacuum and its effects on physiotherapy and rehabilitation services in Africa is being address (howbeit inadequately) by
- Non-Governmental organizations such as
  - VSO
  - HVO
  - Some institutions out of Belgium and some Nordic and Scandinavian Countries
  - Many more NGOs and charities

Implication: Physiotherapist education is not yet a funding priority of resource rich countries!

Since, we are not yet priorities of funding or donor nations or institutions, we need to make ourselves priorities!

How?

Since, we are not yet funding priorities of donor nations or institutions, we need to make ourselves priorities!

By forming partnerships and alliances within and outside Africa

How?

#### Models of partnerships

The following models of partnership can be used to initiate alliances:

- Establishing PT Education program where non Exists
- Strengthening troubled PT Education programs where one exists
- Upgrading curricular of existing PT Education programs
- Partnerships to minister to the specific cultural needs of countries with PT programs

#### Models of partnerships

- I will present four (4) case studies of partnerships, an example to demonstrate each model:
  - Establishing PT Education program where non Exists
  - Strengthening troubled PT Education programs where one exists
  - Upgrading curricular of existing PT Education programs
  - Partnerships to minister to the specific cultural needs of countries with PT programs

#### For Further Reading, See:

John EB, et al (2012). Establishing and Upgrading Physical Therapist Education in Developing Countries: Four Case Examples of Service by Japan and United States Physical Therapist Programs to Nigeria, Suriname, Mongolia, and Jordan. Journal of Physical Therapy Education, 26 (1), p29-39

- Japan-Mongolia Model
  - Prior to 2007, Mongolia with population of >3.1 million people had no PT Education program
  - A partnership was formed between the PT program of the National Guma University (Japan), and Health Sciences University of Mongolia
  - Genesis: A Mongolian physician (Batgerel Oidov, MD) studied PT at Guma University, and thereafter help set up the partnership

- Japan-Mongolia Model
  - Oidov met Masaaki Sakamoto, PT, PhD, chair of the NGU physical therapy department, and through this NGU connection, developed a proposal to work jointly with HSUM to initiate a PT education program at HSUM.
  - Oidov facilitated the interchange between the universities, served as an interpreter for the program, translating Japanese lectures into Mongolian for the students.
  - Sakamoto coordinates the Japanese PT teaching faculty in the program

- Japan-Mongolia Model
  - Today, a PT program exists in Mongolia
  - 1st Class graduated with BSPT in may 2011
  - Program admitted 30 students in the 2010-2011 academic year
  - PT Graduates now in Japan for graduate studies to return as lecturers to the Mongolian PT prigram

- Ghana-Nigeria Model
  - Today, a PT program exists in Ghana with a lot of credit to Nigeria helping to develop the program
  - An Commonwealth grant to Ghana to start a PT Education program led to some Nigerian professors and lecturers taking turns as Visiting lecturers to Ghana

 Japan-Mongolia Model is an example of resource rich developed country helping a resource poor developing country

 Ghana-Nigerian model is an example of resource rich (human capital only) developing nation helping a resource poor (human capital) developing nation

## Strengthening troubled PT Education programs where one exists

- HVO-Suriname Model
  - In the 1970, Suriname a South America country had many of their citizen travel to Netherlands to train as PTs, returned to their countries to work
  - By 1980, 32 PTs were in Suriname
  - Economic and political downturn resulted in only 9 PTs left in Suriname by 1983
  - Suriname Health ministry pressured by Suriname PT Association instructed Anton de kom University of Suriname to commence a 4 year BSPT program

### Strengthening troubled PT Education programs where one exists

- HVO-Suriname Model
  - The new PT Education program started in 1996 was soon troubled due to severe lecturer shortage
  - In 1999, HVO, an NGO or professionals based in the US was approached and they supplied short term Faculty exchange visits,
  - Delivery of a whole course in neurologic PT over Skype/internet
  - Today, Suriname PT Education program now strong

## Strengthening troubled PT Education programs where one exists

- HVO-Suriname Model
  - Today, Suriname PT Education program now strong
  - They've upgrade their BSPT to MSPT entry level
  - PTs now in Suriname up to 55, as of July 2011.
  - The AderkUS program accounted for 33 of these PTs

- 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, 1<sup>st</sup> BSPT program started in Nigeria at the University of Ibadan, 1971/1980 at the University of Lagos, OAU in 1978

- 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

- 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 1<sup>st</sup> 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 1<sup>st</sup> Nigerian DPT ptogram

- 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

### Partnerships to minister to the specific cultural needs of countries with PT programs

#### KUMC-Jordan Model

- Jordan is a middle-eastern country embedded in conservative and religious Islamic culture
- Foreigners had provided PT services for decades and now Jordan is producing PTs through their PT Education programs
- There are shortage of qualified faculty
- Meanwhile, there are also severe challenges and disparities in provision of PT services to the sexes

### Partnerships to minister to the specific cultural needs of countries with PT programs

#### KUMC-Jordan Model

- For instance, in Islamic culture, patients are segregated based on same-sex health care provider
- Because of shortage of female PTs, this implies that Jordanian women are denied needed PT services.
- To address this issues, Jordan University of Technology partnered with the University of Kansas Medical Center, USA to help train their PT lecturers to PhD levels

### Partnerships to minister to the specific cultural needs of countries with PT programs

- KUMC-Jordan Model
  - The Jordanian PT trained educators then returned to Jordan as faculty and researchers

 Female faculty are also trained, and now there is adequate mentorship for female PT students who are about 50% of the JUST student population

#### **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

John EB, et al (2012). Establishing and Upgrading Physical Therapist Education in Developing Countries: Four Case Examples of Service by Japan and United States Physical Therapist Programs to Nigeria, Suriname, Mongolia, and Jordan. *Journal of Physical Therapy Education*, 26 (1), p29-39

#### **Downloads:**

- Powerpoint: <a href="http://www.nigeriaphysio.net/ebjohn-wcpta2012">http://www.nigeriaphysio.net/ebjohn-wcpta2012</a>
- Article: <a href="http://www.nigeriaphysio.net/johneb-et-al-2012">http://www.nigeriaphysio.net/johneb-et-al-2012</a>