Global Leadership: Building Academic Nursing Scholarship, Education, and Service

New York University
College of Nursing
STTI Meeting, Indianapolis
17 Nov. 2013, Session C15
2:45-4:00 pm
Panel Outline

Objectives:
- Challenges & opportunities of nursing global health work

- Eileen Sullivan-Marx: Integrating Global Nursing at NYU
- Ann Kurth: NYU College of Nursing Global
- Gail Melkus: Ghana Diabetes EHR
- Deb Chyun: Capacity building Rwanda & Georgia
- Q & A
The Global Network University: Integrating global nursing education, research & practice at NYU

Eileen Sullivan-Marx
with Ann Kurth, Gail Melkus, Deb Chyun, Madeline Naegle

http://nursing.nyu.edu/global
NYU – a Global Network University

NYU-NYC Schools and Colleges
- College of Nursing
- School of Medicine
- College of Dentistry
- Wagner School of Public Svcs
- Polytechnic Institute (Engineering)
- Stern School of Business
- School of Law
- Silver School of Social Work
- Steinhardt (allied health)

NYU Global Network
- Portal campuses
  - Shanghai
  - Abu Dhabi
  - NYC
- Research Centers:
NYU  World's first global network university (GNU)

- Two portal colleges in Abu Dhabi and Shanghai
- Research sites in Accra, Buenos Aires, Tel Aviv, Prague, Madrid, Paris, London, Florence, DC

http://www.nyu.edu/global/the-global-network-university.html
NYU Global Sites

- NYU: A Global Network University
  - “In and of the City”
  - “In and of the World”

- 40% of students study abroad; 53% of nursing students do

- Engaged global citizens
NYU New York City

GNU structure

Core value on global learning promotes structure
- travel support
- faculty appointments
- research opportunities without barriers
NYU Buenos Aires

- Global Associate Deans or Directors in each school with link to Global Provostial Team
- Faculty Committees on Global Strategies
- Portals – Degrees
- Sites – Study Abroad
NYU Florence

- Research for Nursing Globally
- Core Pillar in Strategic Plan
- Enables cross-disciplinary research
- HIV/AIDS, Workforce, NCD, Aging, Mental Health
NYU College of Nursing Global: Developing an academic unit to advance health solutions

Ann Kurth, with Deb Chyun, Gail Melkus, Mattia Gilmartin, Allison Squires, Marie Claire Roberts, Madeline Naegle

http://nursing.nyu.edu/global
NYUCN Global Mission

To conduct research and implement programs that address health disparities, inform clinical practice, and advance science to improve health and well being of individuals, families and communities in America and throughout the world.

“...in our interconnected world, global health is local health”
Strategic planning was undertaken and development, operations, and methods cores were established within the Division.

**Goals**

- Synergize CN programs/efforts
- Expand partnerships with agencies (WHO, IOM, NIH, PEPFAR, HRSA, CDC, GHWA, Gates Foundation) & local LMIC universities, association, NGOs in key countries
- Engage CN faculty expertise; support/retain junior and senior faculty through research; attract new faculty
- Disseminate knowledge and translational research
NYUCN Global Approach

- Strategic partners to conduct dissemination and implementation science in health system strengthening & HRH, HIV/ID, MCH, reproductive health, NCDs

- Collaboration ethics: Joint production of scientific articles, evidence-based research and practice tools

- Diversify research and programmatic funding from NIH, HRSA, ARHQ, USAID, World Bank and other federal and multi-lateral donors
## Progress Since NYUCN Global Launch

<table>
<thead>
<tr>
<th>Category</th>
<th>2010</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAFF</strong></td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td><strong>GRANTS</strong></td>
<td>7</td>
<td>12 Additional Grants</td>
</tr>
<tr>
<td><strong>FUNDING</strong></td>
<td><strong>$11.2M</strong> *</td>
<td><strong>$6.2M</strong> * Additional Funding</td>
</tr>
<tr>
<td><strong>CORE CAPABILITIES</strong></td>
<td>HIV</td>
<td>HIV, HRH, HSS, NCD, Gender</td>
</tr>
<tr>
<td><strong>DONORS</strong></td>
<td>NIH, Gates Foundation</td>
<td>NIH, USAID¹, US State Dept², UNAIDS³, Banco Santander</td>
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*Aggregate funding, not annualized

¹, ², ³ First funding at NYU

HRH - Human Resources for Health
HSS – Health Systems Strengthening
NCD – Non Communicable Diseases
## Progress Since NYUCN Global Launch

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<tbody>
<tr>
<td><strong>Countries</strong>&lt;br&gt;Kenya, Uganda&lt;br&gt;PAHO region (WHO CC)</td>
<td><strong>Countries</strong>&lt;br&gt;Brazil, Kenya, Uganda, Rwanda, Ghana, Georgia, Global Review (multicountry), Tanzania</td>
</tr>
<tr>
<td><strong>Partners</strong>&lt;br&gt;Univ of Nairobi, Moi Univ, Bomu Hospital</td>
<td><strong>Additional Partners</strong>&lt;br&gt;UoGhana, Rwanda MoH, Kenya MoH, TSU, TSMU, PRAH, UoGeorgia, Touch Foundation, PSI, Zambia FHS, Tanzania NMC, Touch</td>
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Key Faculty Experts & Staff

- Ann Kurth
  Executive Director, NYUCN-Global

- Deborah Chyun
  Deputy Director, NYUCN-Global

- Gail D’Eramo Melkus
  Director, Pless Research Center

- Madeline Naegle
  Director, WHO Collab. Center

- Julia Lange Kessler
  Director, Midwifery Program

- Marc M. Triola
  Associate Dean, Educational Informatics

- Gbenga Ogedegbe
  NCD and Health Disparities research

- Mei Qiu
  Assistant Professor, Collaborative nursing research – China and South Korea

- Mary Brennan
  Clinical Education, Pediatric Nursing, Ghana

- Michele Shedlin
  HIV Research, Latin Am and Caribbean

- Tia Gilmartin
  Leadership/ Cange Mgmt

US STAFF: Kerry Stalonas, Adam Sirois, Nkiru Azikiwe, Jasmine Buttalp, Nok Chhun, John Lizcano

NYU NURSING
NYUCN-Global Programs

NYUCN-Global Faculty/Staff in 40 countries

Argentina, Australia, Belgium, Brazil, China, Colombia, Dominican Republic, Ecuador, Finland, Georgia, Germany, Ghana, Greece, Haiti, India, Iraq, Ireland, Israel, Jamaica, Jordan, Kenya, Mexico, Netherlands, Nicaragua, Norway, Pakistan, Peru, Philippines, Poland, Rwanda, South Africa, South Korea, Spain, Sweden, Switzerland, Tanzania, Uganda, United Arab Emirates, United Kingdom, and the United States.
Core Capabilities

- Maternal and Child Health
- HIV/AIDS and Infectious Diseases
- Non-Communicable Diseases
- Healthy Aging and Elder Care

Health System Strengthening / Health Workforce
Core Capabilities

- **Human Resources for Health (HRH)**
  - Interprofessional training, pre & post-licensure education, retention, task shifting, telemedicine, simulation
  - Global Scholar & Leadership programs

- **Non-Communicable Diseases**
  - Diabetes, CVD, mental health, dental

- **HIV & Infectious Diseases**
  - NIH: multiple R Grants (Gwadz HIV R01, Anastasi complementary therapy, Kurth 6 RC/01s, P30 CDUHR)
  - Gates: Grand Challenge Explorations award, Kenya
Core Capabilities

- Maternal-Child Health
  - Midwifery program
  - HRSA Grant
  - Pediatric/Neonatal program

- Healthy Aging and Eldercare
  - WHO Collaborating Center
  - Hartford Institute
  - NICHE Program

- eHealth
  - Computerized counseling tools
  - Clinical education & training
  - Mobile platforms

NYUCN is ranked #1 in the United States for gerontology nurse practitioner education.
Global Faculty Capacity-Building

- WHO Collaborating Center ‘04 (healthy aging)
- Capacity-building
  - Nurse faculty: PAHO (Naegle), Mexico, Tanzania (Squires), Ghana (Gilmartin, Wesley)
  - Interdisciplinary faculty: Georgia (Chyun)
  - Entire country: Rwanda (Chyun)
NYU CN WHO Collaborating Center in Geriatric Nursing Education

- **Leadership**
  - Madeline A. Naegle, PhD, CNS-PMH,BC, FAAN, Director
  - Michele Shedlin, PhD Assistant Director

- **Network Member:**
  - Pan American Nursing and Midwifery Collaborating Centers Network [PANMCC] (est. 1993)
  - Global Network of Nursing and Midwifery WHO Collaborating Centers (GNNMCC)
WHO Collaborating Center: Geriatric Nursing Education
(2004-present)

**Building capacity**
- Focused WHO work plan
- Collaborative projects with int’l and network partners
- Expand reach, build partnerships for knowledge generation and dissemination
- 12 + Nursing and medical agencies, organizations
  - 50+ Schools and universities: over 50 in Chile, Argentina, Colombia, Peru, Brazil, Mexico, West Indies
- PAHO/NYUCN joint projects

**Expanding Influence through Networks**
Global Network of Nursing and Midwifery Collaborating Centers.
  - 43 world wide
  - Provide technical Expertise in Research, training, education

Health and health care delivery:
- Infectious disease, maternal child health, healthy aging, primary care, non-communicable disease

Continuing education and nursing workforce leadership development

Research training and research network development
# Building Capacity for Nursing Care: Healthy Aging, Geriatric Care

## PAHO/NYUCN Joint Project

- Online access to evidence-based, learning resources: NICHE (Nurses Improving Caring for Health System Elders), HIGN (Hartford Institute for Geriatric Nursing Education)
- Consultation and outreach in support of culturally relevant, system appropriate use of materials, translation of best clinical practices, population relevant training
- Translation for regional adaptation

## Outcomes

- Online Resource Guide for Competencies in Care of Older Adults:
  - 1. Partner validation (LAC)
  - 2. English/Spanish
  - 3. Consultation and training for use, adaptation
- Focused presentations, publications and trainings
- Agency and institutional collaboration to enhance adaptation
Targeted Outcomes: Dynamic Response to Aging Populations in the Americas

- Expand access and innovative strategies for inter-professional and nursing education
- Seek funded projects with sponsoring regional agencies
- Partner in research and educational evaluation
- Continue and expand relationships with regional nursing/medical/public health organizations
- Fully use NYU GN resources in Latin America and the Caribbean for expanded reach and resource development
Ghana Wins! Ghana Nurse Scholars

- 3 cohorts of 10 female nurses
- 30 evidence-based practice projects
  - Leadership summits, Accra & NYC
    - Mentoring/local faculty coaches for projects
    - Project implementation/evaluation
    - Presentation in Accra to next cohort

Partners = Banco Santander
Univ of Ghana SoN, Mujeres Por Africa, Ghana Health Service
Ghana Nurses Program Goal/Objectives

- Improve participants’ ability to be effective leaders within the Ghanaian health sector
  - By the end of the program participants will be able to:
    - Identify personal strengths and weaknesses as a leader
    - Create a personal action plan to improve leadership effectiveness
    - Effectively manage teams
    - Provide effective performance feedback to promote clinical practice excellence
    - Apply principles, practices, and models of organizational change
    - Use quality and safety principles and methods to improve clinical care
    - Apply the chronic care model to clinical practice setting
    - Evaluate the outcomes of a clinical change project
Ghana Nurses Program Design and Teaching Approach

Four year program that seeks to train 30 mid-level nurse managers working in each administrative district of the Ghana Health Service.

Each cohort enrolls into the program for 12-14 months for a two week residential teaching program that includes a 10 month action-learning change project.

Case-based teaching and discussions build new frameworks, integrate evidence into decision making, and learning activities build skills.

One week of the program delivered in Accra, Ghana in collaboration with faculty from the University of Ghana School of Nursing.

The second week of the program delivered in New York City at the NYU campus.
Ghana Nurses Change Projects

- Participants design and implement an organizational change project that provides an opportunity to develop skills in:
  - identifying content for change (what to change)
  - leading process of change (the how of change) within their organizations

- During the action learning period, participants will engage in coaching and feedback sessions with faculty coaches from
  - The University of Ghana, School of Nursing
  - Faculty mentors from the NYU College of Nursing
  - Participants present their Change Project to the following cohort at end of the 12 month action-learning period
Ghana Nurses 2013 Cohort Change Projects

- Improving hand washing rates, Bolgatanga Regional Hospital
- Nurse-led diabetes self-management education program, Military 37 Hospital
- Nursing process documentation improvement projects, Komfo Anokye Teaching Hospital, Korle Bu Teaching Hospital, Ridge Regional Hospital
- Integrating physical assessment skills into clinical teaching routines, University of Ghana and University for Development Studies, Schools of Nursing
- Assisted delivery improvement project using Queen Mothers, Ashanti Health District
Global Health Scholar: MoH Nurses

3-month scientific sabbatical

- Training, coursework in evidence-based practice & research
- Rotations at clinical sites, sim lab
- Conferences, networking
- Faculty mentorship
  - Including when back in home country
- Grant writing for interventions that address health priority issues

First Global Health Scholar Gustav Moyo with Ann Kurth, 2010. Gustav is CEO of the Nurses and Midwives Council, Tanzania
Global HRH Summit, Investing in Workforce – NYC 2011

Invitational Summit
Strengthening 21st Century Global Health Systems: Investing Strategically in the Health Care Workforce
Summit Co-Chairs: Ann E. Kouch, PhD, CNM, FAAN and Marilyn A. Deluca, PhD, RN
Thursday, October 13, 2011

Global HRH Book (2013)


- PDF available NYU Faculty Digital Archive www.archive.nyu.edu/handle/2451/31736

- Searchable through Google, soon Amazon

- www.ondemandbooks.com Espresso Book Service
Leveraging north-south lessons learned and regional networks to enhance use of Associate Clinicians (non-physician providers such as NPs, PAs, Clinical Officers, etc.)
Health Workforce: Ghana 2023 (Kurth, Ogedegbe, Binka)

- Associate clinician (AC) program at new university
  - Over 10 years, train 300 ACs, place in 150 clinics

- Workforce Support Center
  - Interprofessional curriculum
  - Clinical simulation, ICT for pre-svs & continuing education

150 improved clinics
300 midlevel providers
25-45 thousand patients per clinic
Pilot Study
Analyzing the Nursing Work Environment in Mexico

Purpose: pilot test then validate the Mexican Spanish version of ‘Practice Environment Scale of the Nursing Work Index-Revised’ and test an online data collection method

Funding: Internal small grant funding

455 surveys collected from 6 sites around the country over a 2 year period (2011-2012)

Five in-country collaborators to concordantly build research capacity

Status: Finalizing data analysis

PI: Allison Squires, PhD, RN
Nursing Workforce Examples, Middle-Income Country Partner (Squires)

- Partnership with the Mexican Institute for Aging, and the NICHE program and WHO-PAHO Collaborating Center on Aging at NYUCN, to develop and study implementation and patient outcomes impact of nurse-focused capacity building interventions around care of hospitalized older adults in Mexico in both public and private hospitals.
University Role in Global HRH

- Consortium of Universities in Global Health (CUGH) HRH Fellowship (Karen Roush, 2013) White Paper

- Methods
  - Systematic scoping review of the literature
  - Structured interviews with key informants
  - Focused case study (Rwanda HRH)
Preliminary Findings

- 17 articles, all but 1 published in last 5 yrs, only 1 a research article
- Efforts vary widely in scope and goals
  - Evaluation/outcome data primarily process-oriented/short-term
  - Challenges include funding; differences between MoH-MoE; ‘parachute’ models; not enough sharing of best practices/working in isolation or parallel
CUGH Paper: To Improve University HRH

- Coordinate efforts / information sharing across programs and regions
- Commit to long-term support (sustained funding, leadership, mentorship)
- Build trust, respect, transparency, mutual benefits, well-delineated expectations
- Partnership has agreed upon purpose with defined goals and outcomes
- Leverage technology, including e-learning, mHealth, and simulation
- Include governmental agencies responsible for health, education, economics
- Do detailed pre-assessment of local context (available resources, epidemiology, and sociocultural, political/economic factors that impact HRH)
- Conduct systematic evaluation to determine effectiveness of strategies
- Carry out rigorous research on factors influencing success of programs to address HRH, innovative teaching, and recruitment/retention strategies
- Provide leadership training at all levels of the health system, including management, large program administration, and health systems leadership
Tools for HRH Training: Clinical Simulation

- NYU College of Nursing Simulation Center
  - 6,300-square-foot simulation training facility
- New York Simulation Center for Health Sciences
  - 25,000-square-foot simulation facility in Bellevue Hospital
- These State-of-the-Art Simulation Centers support:
  - Inter-professional team training
  - OSCE (Objective Structured Clinical Examination)
  - Telemedicine
- NYU School of Medicine Div. of Educational Informatics
  - Cutting edge course ware and applications
    - VP 21 - innovative Virtual Patient web-based application that allows students to manage virtual patients and collaborate in virtual teams
Using ‘ICT for IPE’

NYU3T: Teaching, Technology, Teamwork

- NYU Nursing and NYU School of Medicine collaborating on interprofessional education project funded by Josiah Macy, Jr. Foundation that provides NYU medical and nursing students with systematic interdisciplinary education in competencies of team-based care using novel technologies

- [http://dei.med.nyu.edu/research/nyu3t](http://dei.med.nyu.edu/research/nyu3t)
Academic Nursing & Global Research Challenges

- Research differs from svgs/education/study abroad mission
- Takes investment & infrastructure
  - Time (balancing home university with partner entity needs)
  - Resources / $
  - Grants mgmt – subcontracts, less IDC, capacity-building re finance/tracking systems, cash mgmt, monitoring, closeout
  - Staff hires, QA, support when distant
  - Facility with int’ travel/security/visas etc.
- Not the traditional tenure track route
  - Early career faculty
  - Funding
Global Research Principles

- **Must be mutually beneficial**
  - How to best actualize that?

- **Study of Ethical Issues in Int’l Nursing Research** (’03 Olson):
  - (1) respect for persons; (2) beneficence; (3) justice; (4) respect for community; (5) contextual caring; collaborative model of researcher–participant relationship; community input & benefit from study

- **Key traits needed** (adapted from Kim et al ‘06): Open-minded, flexibility, adaptability/Cultural humility/Optimism, energy, resiliency, resourcefulness/Honesty & integrity/Stable personal life/ Technical & business skills & political savvy/Conviction the work is meaningful, passion for the cause/Understanding structural contributors & commitment to social justice (Crigger ‘08; Crawford ‘09)
Global Research Principles

- Multiple PI model
- Interprofessional team optimal — multiple disciplines, histories of hierarch, communication

- Share resources (time, funding, IRBs, protocol development & adherence, financial compliance, auditing)
  - Longterm relationship building
  - Takes investment on both sides, not always covered by grants

- Cultural/linguistic/vulnerability differences between researcher & participants

- Authorship

- Mentoring/capacity building of scientific & staff team
Development and implementation of a diabetes electronic health record in Ghana

Gail Melkus, with Albert Amoah, Ann Kurth, Gbenga Ogedegbe, Kelly Newlin
Global Burden of Diabetes

• ~285 million people with diabetes worldwide or 1 in every 10 adults

• 438 million within next 20 years

• US $376 billion cost to the world
# Emerging Countries Diabetes Projections

(people 20-79 years)

<table>
<thead>
<tr>
<th>Region</th>
<th>2010</th>
<th>2030</th>
<th>% Increase</th>
</tr>
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<tbody>
<tr>
<td><strong>AFRICA</strong></td>
<td>12.1</td>
<td>23.9</td>
<td>98</td>
</tr>
<tr>
<td><strong>Middle East &amp; North Africa</strong></td>
<td>26.6</td>
<td>51.7</td>
<td>94</td>
</tr>
<tr>
<td><strong>Southeast Asia</strong></td>
<td>58.7</td>
<td>101.0</td>
<td>72</td>
</tr>
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Diabetes In Ghana

- Population ~ 25 million  2012
  ~ 14 million  1990
- ↑ Life expectancy 66 yrs. 2012
  58 yrs.  1990
- 6.4% adults with diabetes,
  17.0% with pre-diabetes
- ~ 4% of national budget for diabetes costs
Contributors to Diabetes & Pre-diabetes

• Population Growth

• Increased Life Expectancy

• Urbanization

• Dietary Imports

• Obesity rates 25%; 45% in Accra
National Diabetes Services

• 1995 Ministry of Health established National Diabetes Management & Research Centre at Korle Bu Teaching Hospital, Accra

• Partnered with Diabetes Research & Chronic Diseases Reference Lab

• Diabetes Care Team: 7 physicians, 6 nurses, 2 eye nurses, dietitian, 3 nursing assistants, 3 medical records staff
Challenges

• No national diabetes morbidity & mortality data
• Health records handwritten and stored in folders
• Limits data use for diabetes quality improvement: providers, system, and patient outcomes
Project Purpose

• Develop a contextual open-source electronic health record (EHR) system for the National Diabetes Center caring for diabetes patients

• Goal: EHR extensible to all Ghana clinics for diabetes management and health services research to improve diabetes prevention and care outcomes

• Leverage to create a national diabetes registry
Methods

• Collaboratively identified problem; objective, goal

• Conducted needs assessment

• Visited clinic, medical records area, lab data repository

• Reviewed current clinical data-gathering forms

• Current IT use and network
Needs Assessment Findings

- 3,886 of 5,000 diabetes clinic patients data in Lab repository
  - Demographic data, including tribal affiliation and family contacts
  - Physiologic data from laboratory tests
  - Anthropometric measurements

- Medical records shelved, many written with fountain pen

- Hospital does not have full intra or internet connectivity

- IT team connected hospital and National Diabetes Center lab auto-analyzers to main data warehouse, supported by main server with extensive back-up system
Diabetes EHR Development

• 100% patient data entered into Lab Repository database
• Team meetings by Skype and teleconference for EHR platform and software development
• Local collaborator, computer scientist and software developer
• Mutual agreement for EHR similar in concept to Open Medical Record System (OpenMRS®) web-based, multiple platform use: laptop, PC, tablet
• No license for Diabetes EHR for use by other sites in Ghana; other African countries
• On site support for user training and implementation, and system refinements
Diabetes EHR Content

• Based on National Diabetes Center patient data forms

• Cross-walked consensus with WHO and American Diabetes Association recommended standards of diabetes care

• Software development currently underway
NEXT STEPS........

• Team will logic check, beta test, pilot application

• Train health care team users in Diabetes EHR

• Begin implementation with patient visits using EHR