

# **NEW PERSPECTIVES ON POSTGRADUATE EDUCATION: IMPLICATIONS FOR THE CERHI PROGRAM**

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# TALK OUTLINE

- 1. African and U.S. higher education trends and public health needs**
- 2. Possible structures for building research and training programs for CERHI activities to be embedded within a SPH, and/or a medical school, and to be accredited internationally**
- 3. Public health in interprofessional health education**
- 4. The way things look at UAB**
- 5. E-health and Online learning**
- 6. Further thoughts on building up CEHRI....**

# GOALS

- **Can we find models that may be adapted to fit CEHRI goal of acting as a training hub for the next generation of leaders in RH in West Africa, and to stimulate RH research and innovation for improving regional RH?**
- **Need to: (a) develop curricula for short courses, undergraduate, MSc/MPH & PhD; (b) improve teaching & learning; and (c) build capacity**

# **PROJECTED PUBLIC HEALTH WORKFORCE NEEDS IN U.S. AND OTHER COUNTRIES**

**Predicted major workforce shortages of health professionals, including in:**

- public health (be it epidemiologists, health care educators or administrators, etc.)**
- public health physicians and nurses**
- medical & other health-related fields need more public health training**

**To meet projected needs, schools of public health (SPHs) will need to train many more graduates**

**Big RH workforce needs can also be addressed through CEHRI and perhaps best with a SPH**

# **EXPANSION OF HIGHER EDUCATION SYSTEM AND PUBLIC HEALTH IN U.S.**

- **The number of international students studying at U.S. colleges & universities jumped 10% in 2014-15,\* to 975,000; big jumps too in GB and many other European countries**
- **U.S. remains a popular destination because, among other factors:**
  - (a) higher education system has long been known for its quality**
  - (b) in past decade, that reputation has expanded beyond the Ivy League — and so have many international students, getting good educ. at many universities in varied climates and settings**
- **SPHs have also increased in number**

**\*Institute of International Education & State Department**

# **TRENDS IN DEMAND FOR HIGHER EDUCATION IN AFRICA**

**Increasing demands on higher ed. in Africa**

- Overall, rapidly rising student numbers, although enrollment ratios remain lower than in other major world regions**
- Growth of academic staff lags behind student enrollment growth**
  - Student-staff ratios have risen (although there are variations at institutional & faculty levels)**
  - Increased faculty burden (possible disincentive to entry) & creates vicious cycle in context of increasing enrollments**

# POSTGRADUATE ENROLMENT

- **Proportion of Postgraduates generally low**
- **Doctoral enrolments as proportion of postgraduate enrolments even lower**
- **Postgraduate enrolments dominated by males**
- **High drop-out rates**
- **Big deficits in Public Health (students and academic staff)**

**This, combined with major unmet RH needs, creates big opportunities**

# **ACUTE REPROD. HEALTH NEEDS IN NIGERIA & W. AFRICA**

- **High burden of fertility, maternal and child mort., unsafe abortion, GBV, STIs, HIV/AIDS**
- **Poor capacity, country ownership and political commitment to address needs**
- **Continued high pop. growth, unmet FP needs, high rates of poverty & inequality**
- **Major educational/human capital needs, but country is more stable than before**
- **Growing threats from climate change and ongoing sectarian tensions**

**Challenges can be eased by developing RH capacity and evidence-based programs**



# **ACADEMIC PUBLIC HEALTH IN AFRICA**

- **there are very few African SPHs**
- **Small PH programs more often housed in medical schools/colleges (including in Nigeria) & limited to medical practitioners**
- **Bigger shortages in Lusophone and Francophone Africa; & big needs in WA**
  - **limited academic public health capacity & profile, needs inadequately addressed**
  - **need to educate more personnel to manage & develop local & regional health systems**

# **PUBLIC HEALTH NEEDS MORE LEADERS IN NIGERIA & W. AFRICA**

**The field of public health:**

- Is exciting – lets you make a difference, address society's health needs, help improve quality of life, apply science to challenging problems, pursue opportunities for leadership.....**
- Is highly varied, encompasses many academic disciplines and has broad multidisciplinary focus**
- Is somewhat diffuse in its public image, has preventative emphasis, and considers broad context of influences on health outcomes and intervention pathways**

# DEGREE PROGRAMS

- **MPH=cornerstone of education in public health; will remain basic degree despite recent rise of undergraduate options in U.S. & Europe**
- **MPH graduate is expected to demonstrate a firm grasp of core content expertise in his or her area of specialization**
- **DrPH (doctor of public health) and/or PhD is offered for advanced training**
- **There is real potential for developing public health links & programs– including CEHRI within a SPH – at UNIBEN (which has allied schools)**

**Let us consider U.S. model program structures**

# **COUNCIL ON EDUCATION FOR PUBLIC HEALTH (CEPH) IN U.S.**

- **CEPH now (Nov. 2015) accredits 57 SPHs and 110 public-health programs (all on 7-year terms)**
- **Beyond USA, CEPH-accredited schools and programs are located in Canada, Mexico, Lebanon, & West Indies**
- **All have to meet educational quality standards relating to organization, instructional programs, knowledge goals (creation, application and advancement), faculty, staff and students**

# **ASSOCIATION OF SCHOOLS AND PROGRAMS OF PUBLIC HEALTH (ASPPH)**

- **The voice of accredited academic public health, promoting the education, research, service, and practice activities of CEPH-accredited schools and programs**
- **Advocates for advancing population health and more effective public health policies**
- **Now also part of IPEC (Interprofessional Education Collaborative) which aims to connect health professions for better care and develops competency-based learning modules (e.g. for interprofessional health education)**

# **ASPPH CORE COMPETENCY MODELS**

- **Set a baseline for skills that BSc, MPH and DrPH students should be competent in upon graduation**
- **Developed using an expert panel approach over 2007-2009, revised in 2014-15**
- **A relevant resource and guide for educators, administrators, and students**
- **Serve as possible benchmarks to consult in creating new programs or improving existing different-level curricula in CEPH-accredited institutions**

# **RATIONALE FOR DEFINING CORE COMPETENCIES**

**The MPH and DrPH competency development initiative (2007-09) was prompted by:**

- Renewed efforts by ASPH members to better define the MPH and DrPH degrees**
- Challenges of 21st century public health practice and practice-based research**
- Proliferation of competency-based training in academic public health**
- Recommendations by important national organizations (e.g., Institute of Medicine)**
- More emphasis on accountability in higher ed.**

# **DIFFERENCE BETWEEN DrPH AND PHD**

**Both should prepare graduates for research careers, with:**

- PhD training typically aimed at graduates who focus their research in narrowly defined areas**
- DrPH is an advanced professional degree aiming to prepare individuals for public health leadership and practice-based research roles**

**In reality, this distinction is fuzzy...**



# **MPH CORE COMPETENCY MODEL INCLUDES COMPETENCIES IN:**

- A. The 5 traditional core areas of public health; &**
- B. 7 interdisciplinary/cross-cutting areas**

**The Discipline-specific Competencies include:**

- Biostatistics**
- Environmental Health Sciences**
- Epidemiology**
- Health policy and management**
- Social and Behavioral Science**

# **MPH COMPETENCIES IN 7 INTERDISCIPLINARY DOMAINS:**

- **Communication & Informatics**
- **Diversity and Culture (cultural proficiency)**
- **Leadership**
- **Public Health Biology**
- **Professionalism**
- **Program Planning (and assessment)**
- **Systems Thinking**

# **DrPH CORE COMPETENCY MODEL**

**A. Integrates the 5 core areas of public health**

**B. All DrPH graduates should be able to perform upon graduation 7 domains of skills:**

- **Advocacy**
- **Communication**
- **Community/Cultural Orientation**
- **Critical Analysis**
- **Leadership**
- **Management**
- **Professionalism and Ethics**

# **RECENT GROWTH IN PUBLIC HEALTH UNDERGRADUATE EDUCATION**

- **More students seeking public health (PH) undergrad. courses to enter PH workforce, better prepare for more rigorous grad. studies in the field, or to ease entry in fields such as medicine**
- **Increasing numbers of undergraduates with access to education in PH (be it at SPHs or as part of a general liberal arts education)**
- **Baccalaureate public health programs may lead to higher studies in other fields & new career opportunities [*but not all faculty agree*]**

# **ASSPH BACKGROUND DOMAINS: 4 CONTENT AND 2 SKILL AREAS**

- **Science**
- **Social and behavioral sciences**
- **Maths/quantitative reasoning**
- **Humanities/fine arts**
- **Communications**
- **Information literacy**

**Also, students should integrate, apply & synthesize knowledge through a capstone educational experience & field exposure (in public health practice)**

# **UNDERGRADUATE PUBLIC HEALTH DOMAINS**

- **Overview of public health**
- **Role & importance of public health**
- **Identifying & addressing pop. health challenges**
- **Human health**
- **Determinants of health**
- **Project implementation**
- **Overview of the health system**
- **Health policy, law, ethics, & economics**
- **Health communication**

# **FRAMING THE FUTURE**

- **Current ASPPH initiative to present a new vision for public health education in C21**
- **Task force recommends increased:**
  - (i) collaboration with govt. public health agencies;**
  - (ii) understanding of public health among clinical & other health professions;**
  - (iii) possible changes in degree programs (unclear!)**

**Let us consider links with other professional degree programs, and potential for achieving this in Benin City, across Nigeria and WA**

# **INCORPORATING PUBLIC HEALTH INTO OTHER PROF. DEGREE PROGRAMS**

- **Cross-disciplinary collaboration key to improving population health outcomes and health equity**
- **Need to integrate population health concepts into professional and interprofessional curricula of health and other professions**
- **Public health students acquire insights, tools, and vocabulary of clinical and other health professions who, in turn, will integrate public health concepts**

*CDC (2013) Integrating Public Health in Health Professions Education; WHO (2010). Framework for Action on Interprofessional Education and Collaborative Practice.*



# **IPEC (INTERPROFESSIONAL EDUCATION CONFERENCE)**

- **Formed in 2009 by 6 U.S. national education associations\* of schools of the health professions**
- **Created core competencies for interprofessional collaborative practice to guide curricula development across health professions schools**
- **This could help prepare future health professionals for enhanced teamwork & team-based care of patients & improved population health outcomes**

-- \*American Medical Colleges; Dental Ed., Nursing, Osteopathic Med., Pharmacy, and Public Health.

*IPEC (2011) Core Competencies for Interprofessional Collaborative Practice.*

# **MEDICAL STUDENTS' PERCEPTIONS OF PH EDUCATION IN MEDICAL CURRICULA**

- **Poor experience, lack of positive role models (especially to community med. specialists)**
- **Over-emphasis on statistics and epidemiology, use of didactic lectures and ppt. presentations**
- **Health policy content not made relevant and information presented with no context**
- **Many prefer a more challenging curriculum, with more applied field experience and exposure to PH physician role model**

[Based on studies in Canada, Britain, and U.S.]

# **COMMON NEED AMONG PH, MEDICAL, AND OTHER HEALTH PROF. STUDENTS**

**Need for more experiential learning, i.e. integrating classroom learning with real-world experience.**

- PH students could complete a 200-hour, community-based internship or practicum in the public health sector (within your state, country or overseas)**
- Medical students could also help develop community interventions & research projects**
- Everyone could be involved more in lobbying**

# **UNIVERSITY OF ALABAMA AT BIRMINGHAM (UAB)**

- **Nationally ranked among top 25 U.S. universities in total federal research funding & key areas of health sciences (including in National Institutes of Health (NIH) funding)**
- **UAB health system is one of the largest U.S. academic medical centers**
- **SPH offers a concurrent Global Health Certificate**
- **UAB has 19,000 students from 110 countries**
- **Comparatively inexpensive part of the U.S.**

# UAB SPH

Departments: Biostatistics, Environmental Health Sciences, Epidemiology, Health Behavior, Health Care Organization and Policy

Academic Options: MPH and DrPH; and now also: BSc in Public Health; Undergraduate minor



# **WHY HEALTH CARE ORGANIZATION AND POLICY?**

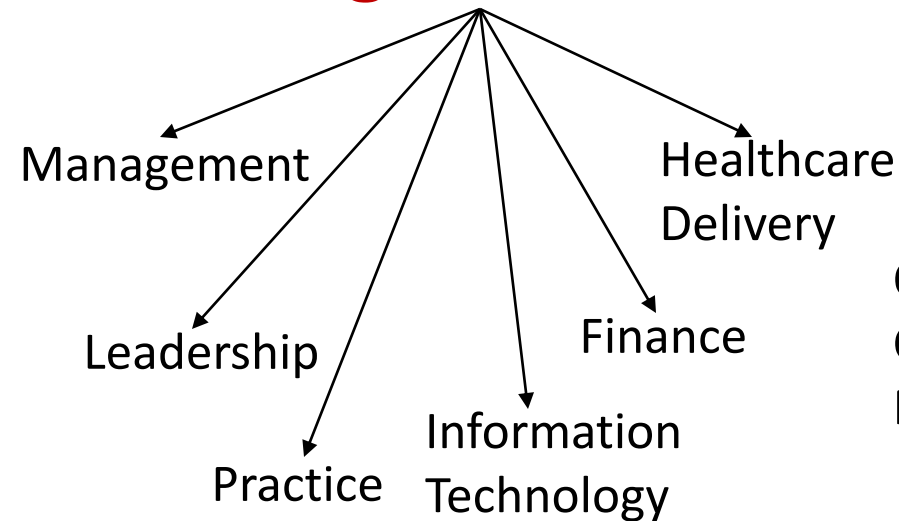
- **Prepares for careers in managing health depts., community health agencies, pharmaceutical & medical service companies, health insurance cos., other orgs.; research careers with govt. health agencies, private think-tanks & academia**
- **Concepts & tools of PH management & planning, health economics, outcomes research & health services evaluation to determine the optimal set of health care institutions & policies to maintain & improve societal health**

DEPARTMENT OF

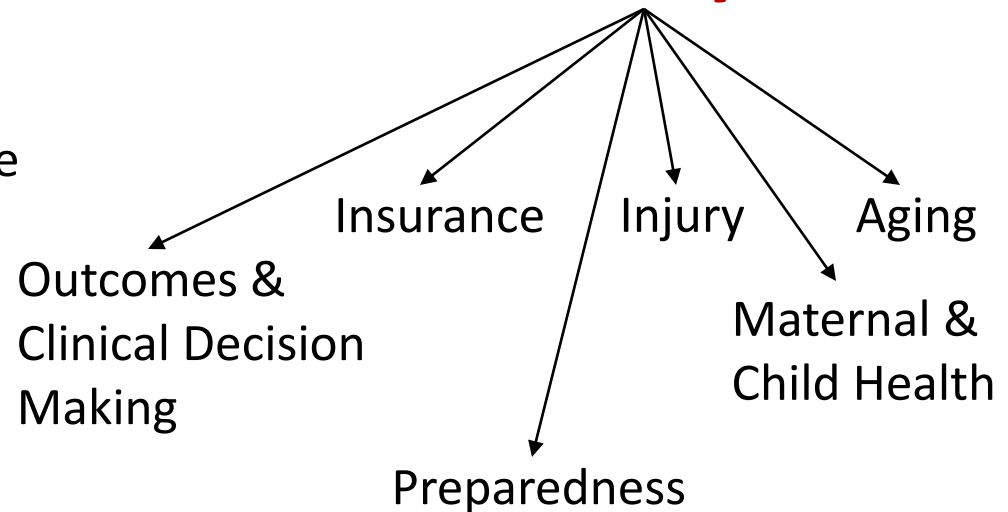
# Health Care Organization and Policy

## Research Interests and Curriculum

### Organization



### Policy



# **DEGREE PROGRAMS, HCOP-UAB**

**DrPH, along with a range of MPH options:**

- **MPH in Health Care Organization (in-person or online)**
- **MPH in Health Policy**
- **MPH in Maternal & Child Health Policy & Leadership**
- **MPH in Outcomes Research (online beginning 2016)**
- **MPH in Public Health Preparedness Management & Policy**

**Dual (coordinated) Programs:**

- **MPH/MBA; MPH/MPA; MPH/JD**
- **MPH/OD; MPH/PhD psychology**
- **MPH (MCH track)/MSN (with SON)**
- **MPH (MCH track)/MSW (in-person or online) (with SW)**

**Also, MPH/MD available with Epidemiology dept.**



# **MCH LEADERSHIP NETWORK AT UAB**

**A group of MCH Bureau funded Leadership Training Programs providing interdisciplinary MCH leadership education, with foci in:**

- MCH leadership & policy, SPH**
- Child-Health leadership in Nursing (SON)**
- MCH nutrition (Pediatrics dept., SOM)**
- Pediatric pulmonary (Pediatrics dept., SOM)**
- Neurodevelopmental disabilities (Civitan center– interdisciplinary)**

# **E-LEARNING**

- **Much hype, increased use, and still limited understanding of its effectiveness**
- **It requires much effort to put up & sustain a course online in a professional way; this is underappreciated by students & univ. administration**
- **Some ICT (information & communication technologies) can be integrated with traditional courses, e.g. web toolkits (which use search engines, social networking sites, major languages, and provide links to other projects) regarding RH topics**
- **I teach in a hybrid/blended model for in-class & online course formats**

# **E-HEALTH (INFLUENCE OF ICT ON HEALTH) AND M-HEALTH**

- **E-Health is improving accessibility to vital health information and ability to transform it into actionable knowledge**
- **M-Health: Growth of mobile technology (including SMS/texting & IVR) has especially exploded in Africa and Asia**
- **Applications in reproductive, maternal, newborn, and child health (RMNCH), but weak evidence of its effectiveness**
- **Still lacks a shared language and common framework to describe and explain m-Health innovations**

# **ONLINE TEACHING –EXPANSION AND LIMITS**

- **It is growing and has bigger future, but there are limits to the utility of new gadgets and ‘active learning methods’**
- **As with e-health, major challenges remain (poor infrastructure, governmental restrictions, limited resources), but affordability barriers are falling**
- **Students can master more basic material online at their own pace, but lectures and especially graduate seminars remain key to developing critical thinking and work skills**

# **BIG CHALLENGES NOT TACKLED BY PUB. HEALTH FIELD/ GLOBAL ECONOMY**

- **Global health is improving, but far-reaching changes to Earth's natural systems threaten human health, economic progress & development gains worldwide**
- **We will need to support a world pop. of 9.7 Bn people by 2050, big increase in WA, & Nigeria's pop. reaching 413 million (surpassing U.S. as world's 3<sup>rd</sup> most populous country)**
- **Meeting FP needs improves short- & long-term health, including reduced maternal mortality, environmental & infrastructural stresses**

# **REPRODUCTIVE, PUBLIC & PLANETARY HEALTH = SUSTAINABLE DEVELOPMENT**

- **Predicting future is hard, but predicting future challenges may be less hard & can be more easily planned for**

➤ **Need to build & expand CEHRI by:**

- 1). building its degree programs**
- 2). Developing links across univ. health schools**
- 3). Confronting health system challenges that cut across multiple sectors, with focus on health and environmental systems, and development agenda**
- 4). Focus on national and regional needs**

**CEHRI programs should advance all these aims**

# CONCLUSIONS

- **There are major gaps in RH and public health capacity and education, in WA and Africa overall**
- **CEHRI could help fill national and regional niche**
- **Developing its institutional profile (and seeking international accreditation) would improve chances of building stronger programs, collaborative partnerships, and W. African platform**
- **Should consider various organizational structures for building research & training programs for CERHI activities (and to situate these perhaps within a SPH)**

# **CONCLUSIONS, II**

- **Should evaluate ASPPH & other resources for possible benchmarks in creating new bacc., MPH and doctoral-level programs and curricula**
- **CEHRI's reach, RH and public health capacity can be built further through interprofessional health education, e-health and online learning**
- **By helping to strengthen RH nationally & regionally, CEHRI could also serve as a seed-bed to build public health capacity**
- **UNIBEN could help foster CEHRI; this would have mutually reinforcing effects**



# **QUESTIONS AND DISCUSSION**