

***The Masters in Public Health as a
mechanism to increase the quality
and quantity of clinician scientists***

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Background

- Need to strengthen clinical research capacity in SA
 - Growing emphasis on research beyond laboratory → policies & populations
 - “Translational” research

Role of public health sciences in strengthening clinical research

Two distinct roles here

- **Content**: providing perspectives on *population* health issues
 - Beyond laboratory or health facility
- **Methods**: PH is disciplinary home of training in *research methods in Health Sciences*
 - Epidemiology & Biostatistics
 - MPH/equivalent is terminal degree for clinician-scientists in US, Europe
 - Regardless of interest in public health **content**

Masters in Public Health at UCT

- Part-time postgraduate degree (since 1999)
 - “Tracks” for
 - Epidemiology & Biostatistics (40% of students)
 - Health Economics (20%)
 - Health Systems & Health Policy (10%)
 - General Public Health (20%)
 - Clinical Research (10%)
- Intake: 50 students across all tracks annually (capped)
- Approximately 70% of all MPH students from non-clinical backgrounds (BA, BSc, Physio/OT)
- Coursework/entry point for PhD

Structure of MPH

- 10 course modules (67% of degree)
 - Semester-long courses
- Mini-dissertation (33% of degree)
 - 1 published/publishable paper with associated protocol, literature review
- Part-time degree: each module structured as an intensive 2-day block followed by late afternoon classroom sessions over semester
- Degree to be completed over 2-4 years

MPH (Clinical Research)

- Designed to develop capacity for clinical research at UCT
 - Focus on advanced research methods for patient-oriented research
 - Target audience: junior clinicians → mid-career professionals
 - Seeking to develop clinical research profile
 - Open to doctors, nurses, allied health sciences
- Established 2008
- First enrolment 2009

Coursework for MPH(Clin Res)

Research methods (7 courses)

- Introduction to Epidemiology
- Advanced Epidemiology
- Clinical Research Methods
- Evidenced-based Medicine
- Biostatistics I, II, III
 - Introductory to advanced biostatistics (eg, survival analyses)

Content areas (3 courses)

- Non-communicable Diseases Epidemiology or Infectious Diseases Epidemiology
- Seminars in Clinical Research
- +1 elective (health economics, general public health)

Progress to date

- Enrolment 6-8 students per year (22 total)
- Of students enrolled
 - 60% specialists with advanced clinical qualification
 - Now seeking to develop research skills towards career in academic medicine
 - Roughly half have plans for pursuing PhD
 - Majority physicians, paediatricians
 - 40% are generalist/Medical Officers who want to develop research-focused careers
 - All with prior research experience

Throughput

- 3 students graduated May 2011
- 3 expected to graduate December 2011
- Bottleneck between coursework completion and mini-dissertation
 - Common problem!
- 4 students left programme
 - Academic reasons

Lessons learned (so far)

- Advanced training in research methods is critical towards building clinical research capacity
 - Students in MPH (Clin Res) support/enable other research activities in their clinical departments
- Part-time study can be challenging for full-time clinicians
 - Most successful students have support of department HODs/colleagues

(Some) advanced training in research methods is important part of PhD programme → clinical research career

- Every PhD student needs some grounding in research methods & associated research skills
 - Level and format of training needs careful consideration, flexibility key
 - **Dissertation-only PhDs need to be supported by platform of focused, appropriate coursework**
- MPH(Clin Res) useful for individuals with particular methodological focus/interest
 - Not every PhD-level researcher needs to have this level of training themselves
 - Every researcher needs access to someone with this level of training

Plans for the future

- Continue MPH(Clin Res) as specialised training programme ('niche')
 - Maximum 8 students per annum
 - Improve throughput
- Develop partnerships with other programmes
 - MPhil (Clinical Epidemiology) at Stellenbosch
- Increase focus on early-career clinicians
 - Post-specialisation & MOs
 - “Seed” MPH(Clin Res) graduates into every clinical department at UCT

Looking forward:

(1) Combined MBChB / MPH

- Combined MPH degree for MBChB students fits with focus on junior clinicians
 - *Precedent* → have had students complete MPH during MBChB
 - Requires talented individuals / mature students
 - Goal 1-2 students per annum, maximum
 - Structuring intercalated degree is concern
 - Part-time coursework over 2-3 year sequence
 - Strong foundation for PhDs

(2) Alternate approaches to teaching research methods towards PhD

- Short-courses in research methods
 - Easiest to operate, good starting place
 - Inadequate depth and/or breadth
- Intensive 1-year Masters
 - Full-time, face-to-face
 - Do we need another Masters programme?
- Online/Distance based learning platform
 - High degree of flexibility (content, timing)
 - *Good quality* distance education is challenge

Thank you