Task Shifting and Capacity Building for Non-Communicable Diseases in Uganda

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Introduction and Aim

- Sub-Saharan Africa has one of the most rapidly growing incidences of non-communicable diseases (NCD) in the World, yet this region suffers from a chronic shortage of physicians and capacity for managing these diseases is inadequate.

- In Uganda, non-physician providers also called clinical officers are rendering chronic HIV care with very good outcomes and they have become an integral part of the district health services and rural health centers. They play a critical role in patient assessment, disease management, triage and referrals and very often under take minor surgical procedures.

- We hypothesized that task shifting and training these clinical officers in chronic disease management may be one potential intervention to build a sustainable capacity in dealing with this worsening burden of non-communicable diseases.

- We developed and implemented a training program for clinical officers to develop local capacity in NCDs.

Results

Phase I: Needs and Competency Assessment Study
Survey Response Rate 62%, 43% primary care, 62% in rural areas, 70% affiliated with a hospital, 80% wanted NCD training.

- Most cited diagnoses Treated were 1) malaria, 2) otitis media and 3) pediatric infections.
- Most cited diagnoses referred 1)trauma, 2) pulmonary disease and 3) cardiac disease.
- There was a great need for additional training in NCDs.
- Continuing medical education was identified as the highest priority.
- Lack of local educational programs and financial resources were cited as the biggest challenges in career advancement and patient care.

Phase II: Training /Education intervention
Curriculum was developed and delivered by Ugandan physicians from Makerere University and Mulago Hospital.

- 50 Clinical Officers participated in the training.
- Continuing medical education was identified as the highest priority.
- Lack of local educational programs and financial resources were cited as the biggest challenges in career advancement and patient care.

Non-Communicable Diseases Curriculum
Modules
- Diabetes
- Hypertension
- Pulmonary Diseases
- Substance Abuse
- Breast Cancer

Small group sessions
- Diabetes course
- Practical station
- ECG Reading
- Urine Dipstick Analysis
- Measuring the Blood Pressure
- Glucometer Measurements
- Diabetes cases
- Treatment and Referrals
- Physical Exams / History Taking
- Screening for Hypertension and Diabetes
- Medication Management
- Diet and Nutrition Counseling
- Substance Abuse/Alcohol/ Smoking education
- Eye Exams

Field/Outreach Medical Camp in the community
- Eye Exams
- Glucometer Measurements
- Measuring the Blood Pressure
- Diet and Nutrition Counseling
- Substance Abuse/Alcohol/ Smoking education
- Physical Exams / History Taking
- Screening for Hypertension and Diabetes

Preliminary Outcomes

The training has Helped Clinical Officers Improve Clinical Skills
With the rapidly growing epidemic of diabetes and hypertension in Sub-Saharan Africa, there is a great need for capacity building particularly in rural areas where there is a serious and perennial shortage of health workers.

Conclusions/Further Study

- CME on chronic diseases was identified as the highest priority.
- Graduates from our program demonstrated improvement in their knowledge and clinical skills associated with NCDs.
- Clinical officers well-trained can play a vital role in managing the growing epidemic of NCDs in Uganda.
- Task shifting is possible and should be encouraged.

Lessons learned
- Engaging local physicians ensured the course content was relevant to the Uganda standards of care and health delivery system. It helped with language and educational pedagogy too.
- Partnership with the Ministry of Health provided access to the clinical officers and attention of the NCD.

Future Directions
- We hope to offer this curriculum to other clinicians in Uganda and East Africa.

Methods

- First we undertook a needs assessment study to identify knowledge gaps and attitudes of Ugandan clinical officers about NCD management.
- A telephone survey was utilized.
- We then developed an education intervention to train Ugandan clinical officers in NCDs.
- A curriculum appropriate to Ugandan settings, was developed, delivered by Ugandan physicians, and includes lectures and hands-on workshops.

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Background: Sub-Saharan Africa has one of the most rapidly growing incidences of non-communicable diseases (NCD) in the World yet this region suffers from a chronic shortage of doctors and capacity for managing these diseases is inadequate. Here we report on three interventions for building sustainable capacity in dealing with this worsening burden of NCD in Uganda; i) task shifting and training of clinical officers (non-physician work force) in chronic disease management, ii) In-service training and targeted CME for practicing physicians and iii) use of mobile technologies and social enterprise

Methods: First we undertook a needs assessment study to identify knowledge gaps and attitudes of Ugandan clinicians about NCD management. We then developed an education intervention to train Ugandan clinical officers in NCDs. A curriculum appropriate to Ugandan settings, was developed, delivered by Ugandan physicians, and includes lectures and hands-on workshops.

Results/Findings: So far 50 clinical officers have graduated from our training program. Participant feedback suggests that the curriculum is appropriate and relevant to their practice needs. There was a perceived improvement in knowledge and readiness to tackle NCDs such as Diabetes and Hypertension. In Phase 2, we will be working with the Makerere Lung institute to implement a primary care training module for rural clinicians and develop tele-networks to link rural clinicians with specialists in National Referral Hospitals.

Interpretation: The major lesson learned is that clinicians in resource poor countries when well-trained and with appropriate resources can play a vital role in managing the growing epidemic of non-communicable diseases in Uganda. Non-physician clinicians who have become an integral part of the district health services and rural health centers can also produce good outcomes. This project is the first of its kind to focus on NCD capacity building among clinical officers in Uganda. We plan to scale up our training programs to other neighboring countries.

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