





# ADVANCED HEALTH RESEARCH METHODS COURSE FOR PROGRAM LEADERS/MANAGERS AND RESEARCHERS IN AFRICA

The University of Nairobi Clinical Epidemiology Unit (Nairobi CEU) in collaboration with the Regional AIDS Training Network (RATN) will conduct an advanced course in *Health Research Methods* from 4<sup>th</sup> – 22<sup>nd</sup> **November, 2013** in Nairobi, Kenya. The course will use a problem-oriented approach and will emphasize utilization of research findings, operations research, health economics, health policy analysis, health systems planning, management and evaluation.

## **Background**

Health problems facing a large proportion of the African population are on the increase. To design and implement cost-effective interventions in the face of limited healthcare resources it is imperative that national policies and the supporting programs be based on relevant and accurate information. However, personnel with skills for collecting information using sound methodology, managing the information and packaging the information for effective decision and policy making are scarce in the region. This course is in part response to this gap identified by an Expert Committee meeting in Research Methodology convened by the Regional AIDS Training Network in May 1997.

## **Course Objectives**

The main objective of the course is to enable producers and users of research findings to design and implement research as well as translate results into action, policy, planning and implementation of evidence based programs. The course will build on principles of epidemiology, biostatistics, health economics and health planning to strengthen the skills of health service managers in solving problems of STD/HIV/AIDS and other associated areas of the health system. Specifically, the participants will be able to:

- Describe the distribution and determinants of diseases especially STD/HIV/AIDS, and determine priority issues for research and policy in HIV/AIDS
- Organize, present, interpret and utilize data for decision making and informing policy
- Utilize qualitative approaches in policy analysis and data gathering
- Utilize operations research methods and study designs
- Utilize concepts of economics and management in a public health sector environment.
- Utilize the computer in communication, analyzing data and preparing reports and presentations

#### **Course Outline**

The training will covered under the following modules:

## Module 1: Intermediate/advanced skills in Epidemiology

- · Introduction to epidemiology
- Measures of disease burden & occurrence
- Measures of disease association
- Epidemiology and strategies in STD/HIV/AIDS control
- Descriptive / Observational studies
- Experimental /Quasi experimental studies
- Data reproducibility and validity
- Interpretation of epidemiologic data
- Screening and diagnostic tests

#### Module 2. Intermediate/advanced skills in Biostatistics

- Introduction to Biostatistics
- Presentation of data
- Population distributions
- Population and sampling distributions
- Sampling and sample size
- Decision errors
- Hypothesis on single population mean/proportion

- Comparison of two population means/proportions
- ANOVA
- Regression
- Analysis of counted data
- Multivariable analysis
- Non-parametric methods

## Module 3. Qualitative Research methods

- Role of qualitative methods
- Data collection I ó Interviews
- Data collection II ó Interviews
- Data collection ó Observation
- Qualitative data analysis
  - Time lines
  - Trend analysis
    Gender analysis
- Social Mapping
- Triangulation

#### Module 4. Operations Research

- Health Priorities/Research Problems
- Recent developments in STD/HIV/AIDS
- Overview of a research proposal
- Literature review
- Research Questions, justification and utility
- Current HIV/AIDS research issues
- Development of research proposal:
- Objectives
- Study Methods
  - Study designs 0
  - Subject selection
  - Outcome measurements
  - Sampling and sample size
  - Ethical Issues
  - Data collection and analysis
- Study Administration and implementation
- Budget and justification
- Strategies for dissemination and application of study findings
  - 0 Quality of evidence/Best practices
  - Research results/policy formulation

### Module 5. Health Economics, Policy and Planning

- Health Economics: Concepts and analysis
- Macro economic environment and health
- **Target Group** 
  - Middle and top level managers of HIV/AIDS programs
  - Community based service supervisors
  - Researchers

**Duration:** 3 weeks

Course dates: 4<sup>th</sup> . 22<sup>th</sup> November, 2013

Course Fees: US\$ 1.650 per participant. (Local participants pay \$1100 for tuition and daytime meals only)

This will cover tuition, accommodation and meals. Participants are expected to cover their

transportation and out of pocket expenses.

## Scholarships:

A limited number of scholarships (full or partial) are available for participants from East and Southern Africa. However, applicants with full or partial funding stand better chances of being accepted.

# Interested applicants should send the attached application form to:

The Course Coordinator Advanced Health Research Methods Course Clinical Epidemiology Unit School of Medicine University of Nairobi P.O. Box 19676 - 00202 Nairobi

Phone: 254-(0)710657725

E-mail: nbiceu@uonbi.ac.ke or eknjeru@uonbi.ac.ke

Or to:

The Training Programs Manager, Regional AIDS Training Network (RATN), Morningside Office Park, 4th Floor, Wing B, Ngong Road P.O. Box 16035-00100 GPO, Nairobi

Phone: 254-20-2635929, 2635938 Mobile: +254 (0)734999975, (0)724255849

Email: carolm@ratn.org or ratn@ratn.org

- Health care systems care financing mechanisms
- Principles of economic evaluation
- Strategic and Project Management in health
- Budgeting and financial management
- Health planning and human resources
- Quality assurance in health care delivery
- Option appraisal
- health policy and planning
- Budgeting and equity
- National health accounts
- Programming, and management capacity
- Monitoring and Evaluation

#### Module 6. Computer Skills for Managers

- Computer Hardware and software
- Managing computers using Windows
- Word for Windows
- EPIINFO
- **SPSS**
- POWERPOINT
- Internet and Email

In addition, participants will be guided in writing an operations research proposal in an area of their interest which they will be expected to implement on completion of the course.