



**COURSE BRIEF - OPERATIONAL RESEARCH TRAINING  
(LUXEMBOURG 2012)**

**MEDECINS SANS FRONTIERES - BRUSSELS & THE CENTRE  
FOR STRATEGIC HEALTH INFORMATION AND  
OPERATIONAL RESEARCH, THE UNION, PARIS**

**1. Purpose**

To develop the practical skills for conducting operational research and publishing the findings.

**2. Course curriculum and expected outputs**

The course is composed of three practical modules of 5 days each and conducted over a period of 8-10 months at MSF Luxembourg, Luxembourg City, as follows.

**Module 1a. Research questions and protocol development / 2<sup>nd</sup> – 6<sup>th</sup> July 2012**

The purpose of this five-day module is to develop a thorough understanding amongst participants about what operational research is all about and to ensure that a draft research protocol is produced before they return to their own countries. The teaching will be through lectures, discussions, exercises and use of completed and published operational research. Most important, the participants will actually develop their research questions and written protocols during the week with the support of the facilitators.

**Brief content overview**

- Introduction to operational research
- Research terminology
- Asking the right research questions
- Aims and Objectives
- Developing research protocols
- Patients and data
- Simple analysis
- Ethics

**Output: Draft study protocol written by each participant.**

**Module 1b. Data management and analysis / 9<sup>th</sup> – 13<sup>rd</sup> July 2012**

The purpose of this module is to ensure that participants understand the importance of good data quality and have the skills to produce an efficient electronic data entry form, based on principles adaptable to their specific needs.

**Brief content overview**

- Importance of good data
- Designing an efficient data entry instrument (Epi Data)

- Making an efficient computer data entry questionnaire
- Entering and validating data entry
- Applying the knowledge to specific needs of individual participants
- Introduction to data analysis
- Exercises

**Output: Draft instrument for electronic data entry for each participant**

## Module 2. Writing a scientific paper writing / May 2013

The purpose of this module is to help participants use the results of their scientific papers and turn it into a draft article for submission for publication. How to deal with on-line submission and editors' and reviewers' comments will also be covered

### **Brief content overview**

- Learn the principles of writing a scientific paper in a step by step manner
- During the module, write a draft paper
- Learn how to deal with online submission and peer review

**Output: Draft manuscript**

### **3. Selection criteria for successful applicants**

*Applicants must satisfy the following strict selection criteria:*

- a) Be involved actively in the running of a MSF, national or state program or major health institution in a program or disease specific field (eg primary or secondary care, Nutrition, TB, HIV, non-communicable diseases, Maternal and child health etc)
- b) Provide written commitment to attend all three modules of the training course, return to their programme or institution after the course and implement course knowledge at programme level
- c) Provide a written statement from the coordination/ operations or relevant authority attesting to the investment of resources and granting permission to have time and opportunity to carry out operational research
- d) Provide a written statement from a mentor (if available) describing how they know the candidate and how they propose to provide support to complete the course successfully.
- e) *Outline a half page of text that a) describes a problem that the candidate has identified within a given program and b) formulation of a research question that is proposed to be developed into an operational research project. Please note that the research questions using routine programme data are preferred as prospective studies are unlikely to fit into the time-line and expected outputs of the course.*
- f) Have a Masters in Public Health (MPH) or equivalent, or a strong recommendation.
- g) Be fluent in written and spoken English
- h) Be computer literate

*Nurses and data analysts who meet the above criteria are strongly encouraged to apply*

#### 4. Approach to training

- This is a *target-oriented training* with defined milestones and expected outputs. Failure to fulfil the expected outputs linked to each module implies the candidate does not return for the next module.
- Participants go through the whole research process and complete the course with a defined *product*.

#### 5. What does the participant gain?

- Practical skills for undertaking the entire operational research process from concept to publication.
- The experience of learning and sharing knowledge within a team of motivated participants and talented facilitators in operational research (who act as mentors) from different countries. Facilitation is currently provided by a selected group of facilitators from MSF, the Union-Paris, selected universities and the Public Health Foundation of India (PHFI) all of whom have extensive program experience in conducting and mentoring operational research.
- An opportunity to excel and gain visibility in operational research and to prepare for increased research responsibilities in their country or institution
- Possibility of submitting published papers and eventually acquiring a PhD in operational research. *Fellowships* in operational research will be provided as a way of fostering longer term *retention* and *career opportunities* at program level. In particular, links have been made with the universities to have published papers put together for consideration for an eventual PhD in operational research.
- Participants are strongly encouraged to help train and eventually lead others (as mentors) to maximise long term capacity development and impact. The philosophy used is “see one, do one, teach one”.

#### 6. What does the MSF or the participant’s organisation or institution gain?

- A person who is well trained in operational research and can help their program or institution undertake relevant operational research to identify challenges and improve programme performance in a sustainable manner.
- This will be a “pioneering initiative” giving rationale *for longer term contracts*, a *career opportunity* including the possibility of pursuing a PhD in the field of operational research. The approach will strongly compliment “innovation” within routine operations and contribute to critical reflection on program orientation and its impact over time.
- The initiative would also foster *medical staff-retention* and attract qualified staff and reduce turn-over which hampers continuity of research initiatives.

#### 7. Sponsorship

A full scholarship will be offered to **successful applicants**. The scholarship includes all tuition fees, travel expenses, meals and accommodation.

#### 8. Application deadline: **6<sup>th</sup> April 2012**

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