

## **Introduction:**

Bhutan has made a remarkable progress in health outcomes in the last few decades despite late introduction of modern health care system. However, with changing times, Bhutan is undergoing rapid epidemiological transition and is confronted with many modern health challenges. On the other hand, strengthening the research capacity has been recognized as an effective and efficient tool in advancing health system and development worldwide. In this light, HMIS and Research Section (HRS) under the Policy and Planning Division has embarked on the journey to strengthen the health research system with its primary mandate to facilitate and strengthen the research capacity of the healthcare providers across all levels in the country.

Realizing the utmost need of building/enhancing the research capacity of the country and the need to have evidence based planning for a strong health system, the HRS has been striving towards building the research capacity of the healthcare providers ever since the establishment of Health Research and Epidemiology Unit in 1995.

However, the conventional way of training on research methods did not lead to expected increase in the number of researches and publications. Therefore, we have piloted a “B SMART” Workshop in 2016 and 2018 trying to be like the highly successful SORT-IT (Structured Operational Research and Training Initiative) model of operational research capacity building. Encouraged by the success of the 1st National B SMART workshop and the 2nd National B SMART workshop the 3<sup>rd</sup> National B SMART workshop will be conducted in 2019.

The new approach imparts skills for undertaking the entire research process from concept to publication. As a result, 10 out of 12 participants of the first batch and 12 out of 13 of the second batch completed all the milestones of the workshop.

**Purpose:** To develop the practical skills for conducting operational research, publishing the findings, and presentation of findings to high level policy makers of the Ministry of Health, KGUMSB, and other stakeholders.

**Workshop curriculum:** The workshop comprises four modules.

### ***Module 1: Research Questions and Protocol Development***

This will be a six day module to help participants develop a thorough understanding about what operational research is all about and to ensure that a draft research protocol is produced before they completion of the module. The teaching will be through lectures, discussions, exercises and use of completed and published operational research as examples, and participants will have the opportunity to present and discuss their written protocols with the facilitators. This six-day module will continue with Module 2.

### **Brief content overview**

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

(Key Deliverable Output: A Draft Scientific Protocol)

### ***Module 2: Data management and data analysis***

This will be a six-day module to help participants understand data management and data analysis. The module will consist of:

2 days: Data entry (Ensure efficient quality assured data entry)

2 days: Data analysis

1 day: Application of learning on specific projects

1 day: Plenary and feedback

### **Brief content overview**

- Designing an efficient data entry instrument
- Introduction to data analysis
- Making an efficient computer data entry questionnaire
- Producing relevant analysis results in tabular form
- Entering and validating data entry
- Daily homework on own electronic data entry instrument

(Key Deliverable Output: Draft electronic data entry instrument)

### ***Module 3: STATA Software, data management and analysis***

This module is not a part of the original SORT IT modules. SORT IT modules have only three modules. The Module 3 of SORT IT expanded as Module 3 and Module 4 for Bhutan. The additional six days module was added in Bhutanese courses, after an extensive deliberation, because the data analysis competencies of the participants in Bhutanese courses are generally weak. The SORT IT takes in only candidates with master's degree or someone with proven research experiences whereas the participants we are targeting in Bhutan are not limited to those with higher degree or research experiences.

In this module, participants will learn how to use STATA for data analysis, plan for data analysis, manage and analyse data. At the end of the modules all participants should have completed the analysis and generated all tables and figures.

## ***Module 4: Scientific paper writing***

This will be a seven-day module to help participants write their scientific papers and deal with on-line submission and editors' and reviewers' comments

### **Brief content overview**

- Learn the principles of writing a scientific paper
- Learn how to deal with peer review

(Key Deliverable Output: Draft paper to be submitted to a scientific journal)

### **3. Faculty for the workshop**

The workshop will be conducted by the experienced and reputed faculty from Khesar Gyalpo University of Medical Sciences of Bhutan and the alumni of The Union's SORT IT Operational Research course who have now graduated to become faculty. Few alumni of 1<sup>st</sup> and 2<sup>nd</sup> National B SMART workshop will be the junior mentor for the workshop.

### **4. What does the participant gain?**

- Skills for undertaking the entire operational research process from concept to publication
- The experience of learning and sharing knowledge within a team of motivated and talented participants
- An opportunity to excel and gain visibility in operational research and to prepare for increased research responsibilities and research leadership

### **5. Workshop follow-up**

In between the modules 2 and 3, candidates will return to their respective health programmes/projects to continue their routine work and in addition collect the data pertaining to their research projects.

Participants will be contacted periodically in between the modules and after the completion of the workshop to determine accomplishments.

Workshop facilitators will be available to provide advice upon request.

### **6. Criteria for successful applicants**

- a) Committed to attend all four modules of the training workshop

- b) Committed to return to their programme or institution after the workshop and implement workshop knowledge at programme or institutional level
- c) Support, investment and commitment from supervisor to carry out research
- d) Ability to mobilize the funding required to carry out operational research, if required
- e) Preference will be given to those applicants with research topic on National Health Research Priority List (draft) and to those who have the fund secured or to those whose research doesn't require fund.

## 7. Research Questions – guidance

In your application you will be asked to formulate and submit a research question based on a perceived problem within the programme or health system in which you work. The research will have to be carried out within a 4 - 6 month time frame and therefore we strongly encourage simple research projects that are based on monitoring and evaluation data that are already collected and available in registers or treatment cards. Prospective studies and studies involving patient interventions and patient questionnaires are less likely to be accepted as suitable for this workshop as they cannot usually be completed within the time frame.

## 8. Funding

The workshop will be conducted with financial support from the World Health Organization. A total of 12 candidates will be selected and the organizer will bear the DSA/TA for all 12 successful applicants.

## 9. Application deadline:

*Please email or post your application form to the following address*

HMIS and Research Section (HRS)  
Policy and Planning Division  
Ministry of Health  
Tel: 02 322602 ext 308 | Mobile:17920280  
E-mail: [msgurung@health.gov.bt](mailto:msgurung@health.gov.bt)

**Please contact Mr Mongal Singh Gurung, Sr. Research Officer, for any clarifications through e-mail or telephone at the address above (email is preferred).**

Note:

1. Failure to provide all of the above requested information may result in the rejection of your application.
2. The decision of the selection committee will be final in matters related to the selection to the workshop. You will not be able to pursue any dispute related to selection legally. Apply to the workshop only if you agree to this condition.