



**Workshop on Systematic Reviews and Meta-analysis**  
**7-9 May 2019**  
**Post-event report**

**Conference Organizers:**

Course Director: Dr. R. R. Tiwari, Director and Scientist G, ICMR-NIREH, Bhopal  
Organizing Secretary: Dr. Vikas Dhiman, Scientist B, ICMR-NIREH, Bhopal

**Venue:**

ICMR-National Institute for Research in Environmental Health (NIREH), Kamla Nehru Hospital Building, Gandhi Medical College campus, Bhopal-462001

**Funding:**

The registration fees of the participants funded the workshop

**Participants:**

A total 61 applications were received and 20 participants were registered for the workshop. The profile of the participants ranged from public health practitioners, doctors, and neuroscientists to basic medical scientists and statisticians.

**Objectives:**

Systematic Reviews and Meta-analysis are considered highest quality of evidence in bio-medical research. Through this national workshop comprising of lectures, assignments and hands-on sessions, we aimed to help young researchers learn and implement the methodology and techniques used in systematic reviews and meta-analysis.

**Conference format:**

The two and a half day workshop comprised of lectures, assignments and hands-on sessions. The workshop was structured to foster the discussions among the resource faculty and participants around the basic concepts of systematic reviews and meta-analysis. This was achieved by hosting group hands-on work, interactive sessions and quiz.

**Workshop proceedings:**

*Day 1:* Dr. Vikas Dhiman commenced the workshop with a welcome note, followed by lighting of the lamp with melodious Saraswati Vandana. It was followed by

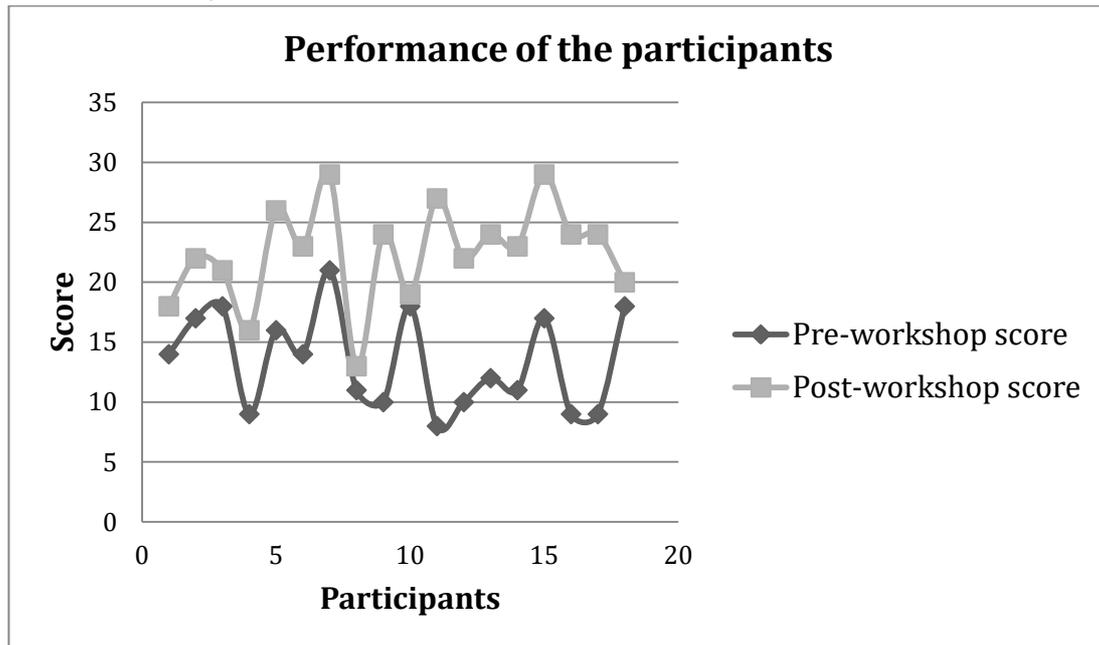
welcoming the Chief Guest of the workshop - Dr. Sanjay Zodpey, Vice President - Academics, Public Health Foundation of India, New Delhi and Director – Indian Institute of Public Health, Delhi; and guest faculty - Dr. Anju Sinha, Scientist F, Division of Reproductive and Child Health, ICMR headquarters, New Delhi; by Dr. R. R. Tiwari by presenting them with beautiful saplings as a token of appreciation. The overview of the workshop was then presented by Dr. Anil Prakash, Scientist G, ICMR-NIREH. This was followed by the keynote lecture delivered by Dr. Sanjay Zodpey, who presented current scenario of healthcare in India by presenting various health related parameters. Dr. Zodpey emphasized on the usefulness of systematic reviews and meta-analysis in improving the healthcare needs of the country.

This was followed by lecture on evidence-based medicine by Dr. Tiwari, who gave an overview of the need and usefulness of evidence synthesis in bio-medical research. Dr. Anju Sinha, one of our resource faculties, gave lectures on how to develop a protocol for systematic reviews for interventional studies/clinical trials and on critical appraisal and bias in evidence synthesis. The day was culminated with hands-on session on RevMan software.

*Day 2:* The second day of the workshop started with welcoming of Dr. Ashoo Grover, Scientist E and Head, Research Methodology Cell, ICMR Headquarters, New Delhi; and Dr. Geetha Menon, Scientist E, ICMR-NIMS, New Delhi by Dr. R. R. Tiwari. Each participant then presented and discussed their research questions and PICOs (Participants, Intervention, Comparator, Outcome) with the resource faculties. Dr. Ashoo Grover then gave lecture on developing a Protocol for Systematic Review for observational studies, Literature Search and Data Extraction. This was followed by talk on statistical approach for meta-analysis by Dr. Geetha Menon and introduction to Meta-XL and Meta-Essential software's. All participants were divided into four groups and each group was allotted a research question for hands-on task. The day ended with hands-on sessions where participants worked to develop a protocol and search strategy with respective to their research question.

*Day 3:* The third day started with presentations where one participant from each of the four groups presented the work done on their respective research question. Following this, Dr. Geetha Menon gave lecture on how to analyze the data for meta-analysis. This was followed by hands-on sessions on Meta-XL software for the analysis of the data. At the end, a quiz was organized. The workshop culminated with distribution of the certificates to the participants by Dr. Anil Prakash and vote of thanks by Dr. Yogesh Sabde, Scientist E, ICMR-NIREH.

### Attendee survey:



### Participant's feedback:

*“Congratulations Dr. Vikas and Team for such a well planned and organized workshop. Everything about the event from providing the study material to having such wonderful speakers is really appreciable” – Dr. Seema*

*“Thanks Dr. Vikas and team for such a great workshop. All resource faculties have shared their experiences and knowledge, which is very useful for doing systematic reviews and meta-analysis” – Dr. Nilesh*

### Glimpses from the workshop:



**Lamp lighting**



**Keynote address by Dr. Zodpey**



**Lecture on 'Evidence based Medicine' by Dr. Tiwari**



**Lecture by Dr. Anju Sinha**



**Hands-on session**



**Lecture by Dr. Ashoo Grover**



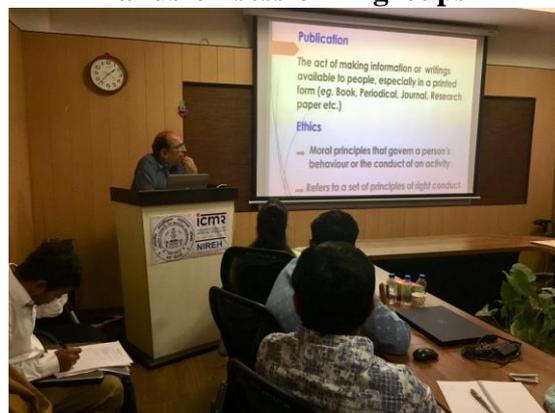
**Lecture by Dr. Geetha Menon**



**Hands-on session in groups**



**Presentation by the participants**



**Publication Ethics lecture by Dr. Anil Prakash**



**Quiz competition**



**Group photograph**