

## **Background**

Division of Clinical Research and training (DCRT) and The Centre for Advanced Research & Excellence in Autism and Developmental Disorders (CARE-ADD), St. John's Medical College and Research Institute, Bangalore jointly organized two days workshop on Implementation Science Research.

This short course provided participants with a comprehensive overview of the field of Implementation science and how to:

- Undertake relevant implementation science research
- Use appropriate theoretical models, research designs, and measurements
- Collaborate within India and globally in implementation science research
- Translate your research findings into policy and practice

We are delighted to present a brief report of the course conducted from October 4<sup>th</sup> to 5<sup>th</sup>, 2023.

The Karnataka Medical Council accredited and awarded 4 credit points for the participants & the faculty.

## **Objectives of the course:**

1. To provide a primer on Implementation Science Research (ISR)
2. To make friends and build collaborations for future large grants and projects.

## **Participants:**

The course has been designed for faculty, postgraduate and PhD students from medical, dental, nursing and pharmacy colleges, ethics committee members, regulators, librarians and health policy makers. It may also be of interest to anyone looking to learn more about Implementation Science Research. We had 51 participants from 21 different specialties across 16 cities in India.



## Faculty:

The faculties were from St. John's Medical College and Research Institute, Bangalore, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, The George Institute for Global Health India, Hyderabad and Public Health Foundation of India.

<b>The George Institute for Global Health, Hyderabad</b> Dr. Praveen Devarsetty	<b>St. John's Medical College, Bangalore</b> Dr. Denis Xavier	<b>Sree Chitra Tirunal Institute for Medical Sciences and Technology, (SCTIMST), Trivandrum</b> Dr. Jeemon Panniyammakal
<b>Washington University in St. Louis, USA</b> Dr. Mark Huffman	<b>Public Health Foundation of India, New Delhi</b> Dr. Prabhakaran Dorairaj Dr. Kavita Singh Dr. Shalini Bassi	

## Course methods:

We had **6** interactive lectures, **2** plenary sessions, **2** fireside chats, and **5** small group discussion sessions. The topics covered in the workshop included, need for Implementation Science Research, why some evidence-based interventions do not work in the community, how do we understand “what works” for people who need it and with better speed, fidelity, efficiency, and quality. Different models and frameworks for Implementation Science Research were covered along with their appropriate usage in terms of context and aim of the study.

**Dr Denis** presented an overview on the need to do implementation research in India and also stressed upon the need for collaborations across different sectors.

**Dr Praveen** discussed the theories, models and frameworks applicable across formative, design and implementation phase of an implementation research project. He discussed Process models, Determinants frameworks/ classic theories and evaluation frameworks to explain process of translating research into practice, understanding what influences implementation outcomes and evaluating implementation respectively.

**Dr Jeemon** introduced the audience to complex interventions, methods to design studies that use complex interventions and implementation research methods for evaluation of these complex interventions. He also discussed about usage of theories and frameworks from his on-going and completed research projects.

**Dr Shalini** discussed about Community-based participatory research (CBPR) and the need for stakeholder engagement with multiple scenarios of very successful stakeholder engagement in her research experience.

**Dr Kavita** presented strategies to prepare a successful implementation research proposal and key points to get funding.

**Dr Mark** shared his enriching and inspiring experience working in Kerala as an American researcher. He discussed about the challenges and mitigation strategies while building collaboration and stakeholder engagements. He also emphasized upon importance of trust, friendship and family support in collaborative and meaningful research.

**Dr Prabhakaran** shared the importance of interacting and engaging policy makers for successful implementation any proven intervention. He briefly discussed about policy dialogues and policy briefs, how to write them and present to the key policy makers by sharing his experiences working at the grass root level.

The **plenary sessions** were conducted with discussions between the group members and Dr. Denis. Each group was asked to reflect and write key leanings from the sessions each day.

The **group activities** included four project presentations. The speakers for project presentations and Q & A sessions were picked up randomly by chits. After the presentations, the entire group answered questions from the audience and faculty.

### Project Presentation; Group question & answer session



Group A



Group B



Group C



Group D

The following topics were presented for the **Group Project**:

Group	Date	Study design	Study title	No. of centers/FU	Budget
<b>A</b> <b>Alchemists</b>	5 <sup>th</sup> Oct	Type II hybrid design using a stepped wedge RCT	A pragmatic stepped wedge trial to test an integrated referral care pathway (IRCP) for high-risk CVD patients in India – A multi-state implementation research project - <b>SWIFTCARE</b>	24 PHCs 5 years	12cr
<b>B</b> <b>PariKara</b>	5 <sup>th</sup> Oct	Type II hybrid design using a cRCT	Implementation research to evaluate a Physical Activity Intervention in a Rural Setting for elderly persons in Karnataka- <b>PAIRS</b>	Rural Karnataka	48.11 Lakhs
<b>C</b> <b>MIMO</b>	5 <sup>th</sup> Oct	Type II hybrid design	Implementation of a multi-pronged, comprehensive <b>Intervention Model</b> to improve the uptake of THR and complementary feeding practices among children aged 6-36 months to reduce the risk of malnutrition: <b>MIMO</b>	1 3 years	6cr
<b>D</b> <b>Dare Devils</b>	5 <sup>th</sup> Oct	Type II hybrid design	A strategy to improve Accessibility & Effectiveness of District Mental Health Program among adults in Malur Taluk of Kolar District - a Mixed method Implementation Study- <b>SOUMITRA</b>	1 3 years	4cr



## Award to Group Winner

Prize for the best group was awarded based on the performance during project presentation. Project presentations were evaluated by 4 judges; Dr. Kavita Singh, PHFI, Dr. Roopa Shivashankar, ICMR, New Delhi and Dr Jeemon Panniyammakal (SCTIMST), Trivandrum. They evaluated the groups based on Need, Research Question(s) & Objective(s), Methodology (Design, Theories, Models & Framework), Intervention strategies and Evaluation, Stakeholder collaboration, Budget, Quality of slides, Presentation skills, Handling questions and Team work. A certificate and a plaque were awarded to all the participants in the winner group.



Group A- Winners of Best Group along with the organizing team

## Course Evaluation:

All participants provided a **structured** as well as an **open evaluation** of all aspects of the course.

The following were the average scores on 5 in the structured evaluation:

Sessions	Score on 5
Lectures	4.4
Project presentations	4.2
Breakout sessions	4.5
Reading Materials	4.2
Time schedule	4.1
<b>Overall</b>	<b>4.3</b>

## Open / unstructured Feedback

### **What participants liked about the course (quoted verbatim):**

1. Understanding of complex public health intervention dimension and how to wisely choose a framework and have a rationale and context.
2. Implementation/ Intervention should be cost-effective & acceptable to the community & appropriate to the context. Learnt about “context” in implementation research.
3. Conceptual framework of ISR, Process indicators & evaluation of methodology.
4. Importance of timeline, budget, Stakeholder engagement, collaboration and role of internal & external validity in implementation. Having a multidisciplinary team including sociologists for IR.
5. Policy briefs & policy dialogues.
6. Realized the importance of keeping the end in mind at the beginning of research.
7. Importance of taking calculated risk in your career.
8. Realized the knowledge gap & got motivation to fill it.
9. Importance of trust in study participants & collaborations
10. Importance of public involvement in the decision to be made for public. Let people self-select how much they want to contribute.
11. Mentor is vital and need for mentoring.
12. Really appreciate the deliberate attempts from the organizers to involve everyone and making sure that nobody is left unheard.
13. The overall methodology (Process) of conduct of workshop is excellent.
14. The audio-visual, auditorium & food was awesome.
15. All the speakers were inspirational, from Dr Denis to Dr Prabhakaran - Thank you all.
16. Everything was perfectly organized. Kudos to the organizing team.
17. Hearing from the experts in ISR who have ‘Been there, have done that’ was great and a very useful way of learning.

### **Recommendation for improvement**

1. Pre-workshop online meeting could have conducted at least one week before.
2. Time planning- When sessions are too long concentration become a problem.
3. Reading materials could be sent little earlier.
4. More speakers are recommended.
5. Duration of workshop was limited (need 3 days).
6. Dr Kavita’s lecture covering basic concepts should be first.
7. An advanced course in ISR for faculty who wants to go further.
8. Focus can be given more on writing proposals.
9. WHO-TDR-ISR-Tool kit would have been included in reading material.
10. Video based learning especially for community based participatory methodology.
11. Pre-test and Post-test would have been useful.

The course ended on 8<sup>th</sup> September with valedictory function. A valedictory report was presented by the Course Convenor, Dr. Denis and two participants from each group provided feedback on the course. Valedictory function formally ended by a vote of thanks from the course director, Dr. Sowmyashree Mayur Kaku.

-----End of Report-----