



**St. John's Medical College & Research Institute, Bangalore, India**  
In Collaboration with faculty from  
**McMaster University, Canada.**

**17<sup>th</sup>-21<sup>st</sup> February 2025**



**63 participants; 9 faculty members**

**Division of Clinical Research and Training  
&  
Department of Pharmacology  
St. John's Medical College & Research Institute, Bangalore**

**Organizing Team:**

Dr. Denis Xavier  
Dr. Atiya Faruqui  
Dr. Aakanksha Singh  
Ms. Jayalakshmi AH

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### **Background and Inauguration**

St. John's Medical College and Research Institute, Bangalore in association with the Population Health Research Institute, McMaster University, Canada, has been conducting short term courses on health research methods since 2009. We started with a NIH grant in 2009 for 5 years and continued thereafter. In the last 16 years we have trained over 2,355 health professionals from 83 institutions in 45 cities across 12 countries.

We are delighted to present a brief report on our annual one-week course on Health Research Methodology & Evidence Based Medicine conducted from February 17<sup>th</sup> to 21<sup>st</sup>, 2025. The Karnataka Medical Council accredited and awarded 4 credit points for the participants & the faculty.

The inaugural function was held on 17<sup>th</sup> February. It was attended by Rev Fr. Jesudoss Rajamanickam, Director of St. John's National Academy of Health Sciences, Rev. Fr. Tony A J, Address by the Associate Director of Finance, St. John's National Academy of Health Sciences, Dr Arvind Kasthuri, Head of Geriatrics Centre, St John's Medical College and Dr. Tony DS Raj, Dean of Research Institute, special guests, faculty, staff & students



**Inaugural Function**



**Rev. Fr. Jesudoss Rajamanickam  
Director, St. Johns Medical College and Hospital**



**Dr. Tony DS Raj,  
Dean, St. John's Research Institute**



**Dr. Aravind Kasthuri,  
Head of Geriatric Centre, St John's Medical College**



**Dr. Denis Xavier, Course Head, Division of Clinical Research & Training, SJRI**



### Objectives of the course:

- To familiarize a wide range of health professionals in fundamentals of health research methods, and in evidence based medicine.
- To provide an opportunity to interact with like-minded professionals from varied health fields and to explore collaborations.

### 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. We had 63 participants from 36 institutes who represented 22 cities from India, Maldives and Sri Lanka.



### Faculty:

The faculty were from St. John's Medical College and St. John's Research Institute, Bangalore, Public Health Foundation of India, New Delhi & McMaster University, Canada.

#### **McMaster University, Canada**

Dr. Gordon Guyatt  
Dr. P J Devereaux

#### **St. John's Medical College, Bangalore**

Dr. Atiya Faruqui  
Dr. AR Ramesh  
Dr. Deepak Kamath  
Dr. Denis Xavier  
Dr. Tinku Thomas

#### **Public Health Foundation of India, New Delhi**

Dr. Prabhakaran Dorairaj

#### **St. John's Research Institute, Bangalore**

Dr. Prem Pais

### Course methods:

We had 19 interactive lectures, 4 small group protocol discussions, 4 journal clubs and 4 project presentations. There were 14 lectures on health research methods, 4 on statistics and 2 on project management. The topics were on study design and methods, ethics, grants and publications, project & data management, evidence-based medicine, real world evidence and statistics with interactive practical sessions in SPSS.

#### **Lectures on health research methods included:**

1	Introduction to study designs	6	Knowledge translation and Health Policy
2	Cross-sectional design	7	Systematic Review and Meta-analysis
3	Case control study	8	Qualitative studies
4	Cohort study	9	Real World Evidence and Grant Writing
5	Randomized Controlled Trials		

#### **Lectures on evidence-based medicine included:**

1	Evidence Based Medicines & Clinical Practice
2	Principles of Evidence Based Medicine

#### **Lectures on Statistics included:**

1	Parametric Tests and Non-Parametric Tests	3	Correlation and Regression analysis
2	Sample size	4	Survival Analysis

#### **Statistics practical sessions included:**

1. Guided installation of trial version of SPSS
2. Guided hands-on training on
  - a. T-tests
  - b. Chi-squared tests
  - c. ANOVA
  - d. Correlation & Regression

Data sets were sent in advance to perform the statistical tests.

#### **Lectures on project management included:**

1. Regulatory and Budgets
2. Data Management

The lectures on principles and practice of evidence-based medicine (EBM) was by **Dr. Gordon Guyatt and Dr. P J Devereaux from McMaster University, Canada**. The faculty provided an overview of the evolution of EBM, practice of EBM with appropriate examples and the need for collaboration. **Dr. Prabhakaran Dorairaj from PHFI, India**, spoke on the methods of developing health services, rationale of knowledge translation and strategies of working with policy makers.

The **small group activities** included four journal clubs (Registry/Cross sectional study, Case Control, Randomized Controlled Trial and Systematic Review/Meta-analysis) and four project presentations (Registry/Cross sectional study, Case Control, Cohort study and Randomized Controlled Trial).

The **4 Zen protocol sessions** were conducted with discussions between the group members and the faculty on the research question, design, methods, data analysis & budget. The projects developed during the sessions were presented at the end of the course.

The speakers for journal clubs and project presentations were picked up randomly. After the presentations, the full group was invited on stage to answer questions from the audience and faculty.

## Journal Club Presentation: Group Question & Answer Session



Group A



Group B



Group C



Group D

The following were the Journal club articles presented by the groups at the journal club sessions:

Group	Date	Study design	Study title
A	20 Feb	Case Control Study	Risk factors for ischemic and intracerebral hemorrhagic stroke in 22 countries (the <b>INTERSTROKE</b> study): a case-control study. <b>Lancet 2010</b>
B	20 Feb	Randomized Controlled Trials	Cholesterol Lowering in Intermediate-Risk Persons without Cardiovascular Disease ( <b>HOPE -3</b> ) <b>NEJM 2016</b>
C	20 Feb	Cross sectional/ registry	Treatment and outcomes of acute coronary syndromes in India ( <b>CREATE</b> ): a prospective analysis of <b>registry</b> data <b>Lancet 2008</b>
D	20 Feb	Systematic Review and Meta-Analysis	Troponin elevations after non-cardiac, non-vascular surgery are predictive of major adverse cardiac events and mortality. <b>BJA 2016</b>





**Group A**



**Group B**



**Group C**



**Group D**

## Project Presentation: Group Question & Answer Session

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

Group	Date	Study design	Study title
<b>A</b>	21 Feb	Case- control	Association of established and emerging gestational risk factors for Attention Deficit Hyperactivity Disorder in children in India
<b>B</b>	21 Feb	Cohort- prospective	Effect of Sleep Quality on Menstrual Irregularities Among Healthcare Workers
<b>C</b>	21 Feb	RCT	Multiple micronutrient vs Iron folic acid supplementation on iNfanT outcomes
<b>D</b>	21 Feb	Cross-sectional	National traumatic head injury registry: A prospective multicenter observational study in india

## Awards to participants

There were **2 categories of awards for the participants**

1. Dr. David Sackett Memorial Award
2. Dr. Gordon Guyatt Team Award

### 1. Dr. David Sackett Memorial Award:

The assessment was based on a MCQ based test conducted at the end of the course and their group's performance in Journal Club and Project Presentation.

The top 5 participants were:



**Dr Arun T N**  
**BMCRI, Bengaluru**



**Dr Catherine Priyadarshini P**  
**PSG Hospitals, Coimbatore**



**Dr Isha Makrand Khadke**  
**Novartis, Mumbai**



**Dr Pranav Joshi**  
**IMS BHU, Varanasi**



**Dr Riya Ranjith Vaidyar**  
**AIIMS, Patna**

## **2. Dr. Gordon Guyatt Team Award**

The prize for the best group was awarded based on the performance in the journal club and project presentation as well as the individual scores of members in the evaluation. The journal clubs and project presentations were evaluated by 21 Judges who were invited from 12 institutes across India. They evaluated the groups based on knowledge, clarity of presentation, quality of slides and response to the questions. A certificate and a plaque were awarded to all the participants in the winning group.



S. No	Name	Institute
1.	Dr. Alisha Fernandes	HOSMAT College of Physiotherapy, Bengaluru
2.	Dr. Anand Prakash	SJMCH, Bengaluru
3	Dr. Arun T N	BMCRI, Bengaluru
4	Dr. Catherine Priyadarshini P	PSG Hospitals, Coimbatore
5	Dr. Chirag Trivedi	CMC, Ludhiana
6	Dr. Dinesh Kumar Meena	SJRI, Bengaluru
7	Dr. Isha Makrand Khadke	Novartis, Mumbai
8	Dr. Kondampati Nikhila	AIIMS, Bibi Nagar
9	Dr. Nivesh Subburaj	Mehta Multi Specialty Hospital, Chennai
10	Dr. Pranav Joshi	IMS BHU, Varanasi
11	Dr. Riya Ranjith Vaidyar	AIIMS, Patna
12	Dr. Sivasuntharam Induijaa	Uva Wellassa University, Badulla
13	Dr. Sudeep D Ghate	NITTE , Mangalore
14	Dr. Viswanathan S	BMCRI, Bengaluru
15	Dr. E D Ubayanarayana	National Hospital of Sri Lanka, Colombo
16	Dr. Mohammed Muneersha TK	Caritas College of Pharmacy, Kottayam



**Group A- Winners of Best Group**

Each group member received a certificate and a plaque with their name engraved

Certificates of CME accreditation and participation were given to candidates who attended all the sessions.

### **Course Evaluation:**

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



The following were the average scores:

Sessions	Score on 5
Lectures	4.6
Journal clubs	4.7
Project presentations	4.7
Zen Protocol	4.5
Statistics Practical	4.2
Time schedule	4.1
<b>Overall</b>	<b>4.5</b>

### **Open / unstructured Feedback (verbatim)**

#### **What participants liked about the course?**

- Survival analysis & Presentation/ Poster Presentation.
- The various finding opportunities-Indian & International research.
- Time punctuality (although it was not exactly as per the course). I feel like I can do some kind of research. I was inspired to be a researcher, which I always wanted to be.
- Evidence based medicine classes were eye openers.
- How to clinically apply a statistical important outcome.
- Basics of biostatistics, budget & grant writing. How to go about preparing a protocol.
- Effective way of organizing a workshop. Preparing a fundable research project, with collaboration.
- Simplified use of SPSS & the awareness of the research genie app, it is compact yet very informative.
- Survival analysis/ poster/ oral presentation.
- How to appraise journal articles. Writing a complete project proposal.
- Nuances about SRMA. Different types of RCT's & how they are done.
- Which test to be used for different study designs.
- Learning how to interpret graphs, especially forest plot
- How to prepare slides for scientific presentations.
- How to prepare budget and data management plan.
- Critical appraisal of Journal. Writing up a protocol for various study designs. Data management & data entry. Various statistical tests & their application. Interpretations of tables/datasets/ figures.
- This workshop has removed fear of presenting Journal club.
- Poster & oral presentations etiquettes.
- I learned to accept others' ideas and thoughts, not being afraid of ignorance & learning continuously.
- The magic bowl really helped everyone prepare well for the presentations. The quality of the course /lectures was outstanding.

#### **Recommendation for improvement**

- Kindly provide a minimum of 5 minutes after each session to absorb/ read through the materials taught.
- Recommending SPSS as a separate module. Unrelated to this course since there is much to be learnt & practiced in it. It could have also eased the time constraints.
- SPSS course could have been shorter- at least by 2/3<sup>rd</sup>. It will give time for another lecture.
- More time for important, relevant & useful topics like Regulatory Aspects by Dr. Atiya.
- MCQs after every session for self-assessment and understanding.
- We need more lectures on qualitative studies.
- If feasible, please include JC articles in the course workbook, so that we can write important points close to that section

#### **Other comments**

- Please conduct workshop on systematic review and meta-analysis and hands on session on Rayyan.
- Commendable job of DCRT team- smooth and seamless conduct of the course. All study materials were given well in advance. Great venue and lots of meaningful discussions, Enjoyed my time here! Thank You!
- Dr Denis Sir as always – I like your energy. Do conduct these kinds of courses even more frequently. My request to you is to please consider conducting “systematic Review & Meta-analysis Course.
- Overall, this is a new & great experience. People from various domains & various parts of the country. It was nice meeting & getting along with most of them.
- Honestly, I came with the intention of getting a break from routine clinical work to roam around. But after attending Day 1, my motive completely changed, I never thought that how a topic so boring & irrelevant in my UG/PG days was now more interesting & useful.
- Please conduct a hands-on workshop on grant writing, manuscript writing.

#### **Valedictory**

The course ended on 21<sup>st</sup> Feb with valedictory function. A valedictory report was presented by the Course Director. Two participants from each group provided feedback on the course. The Valedictory function was attended by Dr. Tony D S Raj, Dean of Research Institute, faculty, staff & students.



**Valedictory report presented by the course director**



**Participants' Feedback**





**Dr Tony S Raj, Dean, SJRI**



**Dr. Atiya Rehman Faruqui, Faculty, SJMC**

The awards were announced by the Course Director Dr. Denis Xavier. Plaques and Certificates were handed over to the participants by Dean, SJRI.

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



**St. John's Medical College**



**St. John's Research Institute**