

**REPORT OF SECOND TRAINING OF TRAINERS (ToT)
WORKSHOP ON 'RESEARCH METHODOLOGY & BIOSTATISTICS -
HOW TO DO A GOOD DISSERTATION & PUBLISH?'**

Organised by

DEPARTMENT OF EPIDEMIOLOGY

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

21.06.2017 to 23.06.2017



ToT Workshop: Research Methodology And Biostatistics: How To Do A Good Dissertation & Publish?

The Tamil Nadu Dr. M.G.R. Medical University (TNMMU), Department Of Epidemiology (DoE)

21 - 23 June, 2017

Madurai, The Tamil Nadu Dr. M. G. R. Medical University, 21st June 2017

Hon'ble **Vice-Chancellor Prof. Dr. S.Geethalakshmi, M.D., Ph.D.**, inaugurated the second Training of Trainers Workshop on '**RESEARCH METHODOLOGY & BIOSTATISTICS - HOW TO DO A GOOD DISSERTATION & PUBLISH?**' at the Aravind Eye Hospital, Madurai for faculty of the Medical Colleges in the southern & western region affiliated to the University.

The second workshop was attended by 28 faculty from Medical colleges affiliated to this University in Coimbatore, Madurai, Tirunelveli, Kanyakumari, Salem region. Speaking at the workshop, the Hon'ble Vice-Chancellor Prof. Dr.S.Geethalakshmi emphasized a need to conduct systematic Research in Health & publish the generated evidence periodically by Medical fraternity. She said that this Research workshop, would improve quality of Research in Medical Education & promised all support to such workshops. The chairman of Aravind eye hospital Dr. R D Ravindran welcomed the chief guest Hon'ble Vice-Chancellor Prof. Dr.S.Geethalakshmi & the participants and assured all support for the workshop. The dean of Madurai Medical College Dr.M.R.Vairamuthuraja, felicitated the function and summarized the contribution of Hon'ble Vice-Chancellor Prof. Dr.S.Geethalakshmi in medical education & medical research.

Dr.G.Srinivas, Professor of Epidemiology explained the format of the workshop & also thanked Hon'ble Vice-Chancellor, the management of Aravind eye hospital & staff of his department Dr.S.Kalpana, Ms.S.Valarmathi & Mr.P.Ponnusamy for their hard work to conduct the workshop.

Purpose of Workshop

This 3-day ToT Workshop (WS) on 'RESEARCH METHODOLOGY & BIostatISTICS (RMBS): How to do a good Dissertation & Publish?' was intended to for faculty who would facilitate conduct of this workshop in their institutes. The purpose of the workshop was to make faculty understand on how to take/guide first year MD/MS/DM/MCh students from a point at which they have general ideas about their dissertation topic through the development of a solid structure, research strategy and clarity in drafting chapters. The workshop was designed with an objective to build the capacity of participants on research methods and on preparing them to guide first year MD/MS/DM/MCh students for dissertation & facilitate them on manuscript writing for publications

Course contents

Sources of Research Topics, Formulation of Research Question, Literature Review & Organisation using Mendley, Study designs, Diagnostic test, Sampling and estimation of Sample Size, Basic biostatistics, Test of significance, P value, 95% confidence interval, Steps in writing protocol & chapters in Dissertation, Ethics in Research, Communicating Research and Demo of Statistical software.

Learning Methods

The learning method used were lectures for technical inputs, presentation by participants on each day's proceedings, small group sessions between the participants to formulate research Question, selecting appropriate research design and an overview discussion on implementing this workshop in their institution.

Participants: 28 faculty from 15 institutions participated in the workshop

ANNEXURES

Annex 1 Workshop Agenda

Annex 2 List of documents distributed electronically in CD_ToT- RMBS **Folder**
(Modules & Power point of all sessions, Evaluation forms & Workshop
Agenda)

Annex 3 Participant list

Annex 1

Date: 21st June 2017 (Day-1)		
Venue : Laico building, opp. Aravind Eye Hospital, Madurai		
Time	Agenda	Facilitator
9.00 - 9.30 am	Registration	
9.30 - 10.00 am	Pre-test & Introduction	
10.00 – 10.45 am	Inauguration	
11.00 -11.45 am	How to formulate 'Research Objectives'?	Dr.P.Manickam,B.S.M.S.,M.Sc (Epid)., Ph.D. Scientist D, NIE
11.45- 12.30 pm	Writing a Research Protocol	Dr.P.Manickam,B.S.M.S.,M.Sc (Epid)., PhD..Scientist D, NIE
12.30 - 12.45 pm	Small Group Discussion 'Defining and refining research objectives' of each participants	
12.45 – 1.45 pm	Introduction to Workshop Why do we need Research in Health ? Where do Research topics come from?	Dr.G.Srinivas M.D Professor, DoE, TNMMU
1.45 - 2.45 pm	Lunch Time	
2.45 - 4.00 pm	Ethics in Medicine	Dr. Paul KumaranD
4.15 – 5.15 pm	Basics Statistics in Health Research (Types of Data, Displaying & Summarising Data)	Ms.S.Valarmathi, M.Sc., M.Phil., (Ph.D) Research Officer, DoE
5.15 - 5.45 pm	Small group Discussion (Selecting Research Design for some research objectives)	

22nd June 2017 (Day-2)		
10.00- 10.30 am	Recap of day1	Participants
10.30 – 11.45 am	Selecting an appropriate Research Design	Dr.G.Srinivas M.D Professor, DoE, TNMMU
12.00 – 12.45 am	Literature Review - getting started with Zotero	Dr. P.Ganesh Kumar M.D Scientist C, NIE
12.45 – 1.10pm	Diagnostic Test	Mrs.M.Iswarya M.sc Biostatistician Aravind Eye Hospital, Madurai
1.10 – 1.30 pm	Small group Discussion (Diagnostic test)	
1.30 - 2.15 pm	Lunch Time	
2.15 - 3.00 pm	Methods of data collection (Questionnaire development)	Dr. P.Ganesh Kumar M.D Scientist C, NIE
3.00 – 3.15 pm	Small group Discussion (Questionnaire development for research objectives)	
3.15 - 4.15 pm	Estimating Sample Size and Sampling Techniques (Choosing your Research participants)	Ms.S.Valarmathi, M.Sc., M.Phil., (Ph.D)
4.30 – 5.30 pm	Writing dissertation (& University guidelines)	Dr.S.Kalpna Ph.D
23rd June 2017 (Day-3)		
9.00 – 9.30 am	Recap of day 2	Participants
9.30 – 10.45am	Data Management with Epi data and Excel	Dr.Richard Kirubakaran, Ph.D Biostatistician, South Asian Cochrane Centre, Christian Medical College
10.45 – 11.45 am	What test to do when	Ms.S.Valarmathi, M.Sc., M.Phil., (Ph.D)
11.45-12.00 am	Tea Time	
12.00 - 1.10pm	Interpreting the validity of research results (Bias, Confounding)	Dr.G.Srinivas M.D Professor, DoE, TNMMU
1.10 - 1.45 pm	How to get a Research article published?	Dr.Richard Kirubakaran, Ph.D Biostatistician, South Asian Cochrane Centre, Christian Medical College
1.45 - 2.10 pm	Lunch time	
2.10 – 3.00 pm	SPSS Demonstration	Mrs.M.Iswarya M.sc Biostatistician Aravind Eye Hospital, Madurai
3.00 – 4.00pm	Measures of Disease	Dr.G.Srinivas M.D Professor, DoE, TNMMU
4.00 – 4.30 pm	Small Group Discussion: Facilitation of Research workshops in participant's Institute	All Participants
4.30 - 5.15 pm	Post-test, Course Evaluation, Valedictory	

Annex 2:

List of documents distributed electronically in CD_ToT- RMBS **Folder** (Modules & Power point of all sessions, Evaluation forms & Workshop Agenda)

1. Modules of all sessions
2. Power point of all sessions
3. Evaluation forms &
4. Workshop Agenda

Annex 3: Participant list

S.NO	NAME	DEPARTMENT	INSTITUTION
1	Dr.M.Saleem	Comm-med	MMC, Madurai
2	Dr.S.Priya	Comm -med	MMC, Madurai
3	Dr.George varghese	Ophthalmol	Aravind Eye Hospital, Madurai
4	Dr.S.Karthikeyan	Comm -med	PSG Institute, Coimbatore
5	Dr.D.Rock Britto	Comm-med	Chennai Med College, Trichy
6	Dr.S.Priya Banthavi	Pathology	Chennai Med College, Trichy
7	Dr.P.Ashok kumar	Ophthalmol	Govt.Theni Med College, Theni
8	Dr.R.Muthukumaran	Dermatology	Govt.Theni Med College, Theni
9	Dr.T.K.Ponnusamy	Pharmacology	Karpagam Med College
10	Dr.T.M.Karthikeyan	Pathology	Karpagam Med College
11	Dr.Vimal	General – surg	K.A.P.Viswanath College, Trichy
12	Dr.P.Selvam	Comm-med	K.A.P.Viswanath College, Trichy
13	Dr.B.Srimathy	Pediatrics	Thanjavur Medical college
14	Dr.L.Mageswaran	Pharmacology	Thanjavur Medical college
15	Dr.G.Krishnaleela	Comm -med	Thirunelveli Medical college
16	Dr.K.Sunitha	Comm -med	Thirunelveli Medical college
17	Dr.K.Christa	Comm -med	Kanyakumari Govt Medical College
18	Dr.M.Gopal	Comm -med	Kanyakumari Govt Medical College
19	Dr.T.Sundarajan	Microbiology	Govt.Mohana kumaramangalam Med College
20	Dr.M.Duraimurugan	Comm -med	Govt.Mohana kumaramangalam Med College
21	Dr.K.Sujatha	Comm -med	Coimbatore medical college
22	Dr.S.K.Senthilkumar	Comm -med	Coimbatore medical college
23	Dr.Ravichandran	Comm -med	Moogambika college
24	Dr.Vishnu	Comm -med	Moogambika college
25	Dr.M.Suresh	Pathology	Dhanalakshmi Srinivasan Medical College
26	Dr.Antony	Ophthalmology	Joseph Eye Hospital
27.	Dr.M.Thiruvenkadam	Comm-med	Govt.Theni Med college, Theni
28.	Dr.Ran Prabakar	Comm-med	Govt.Theni Med college, Then