Summary Report of Series of workshops
‘Research Methodology and Biostatistics: How to do good Dissertation and Publish?’

for the first year MD/MS/M.Ch/DM Post Graduates conducted across Tamil Nadu for affiliated Medical Colleges of this University: August 2017- February 2018

Dept of Epidemiology,

The Tamil Nadu Dr. M.G.R. Medical University,

Chennai
Purpose of Workshop

This 3-day ToT Workshop (WS) on ‘RESEARCH METHODOLOGY & BIOSTATISTICS (RMBS): How to do a good Dissertation & Publish?’ is intended for 1st year Mch/DM/MD/MS candidates who would move forward from the general ideas about their dissertation topic through the development of a solid structure, research strategy and clarity to draft chapters. The workshop is thus designed with an objective to build the capacity of participants on research methods and to facilitate them on manuscript writing for publications.

Course contents

Sources of Research Topics, Formulation of Research Questions, Literature Review & Organization using Mendeley/Zotero, Choosing an appropriate Study design, Sampling and Estimation of Sample Size, Basic biostatistics, What test to do when?, Test of Significance, P value & 95% Confidence Interval, Writing Protocol, Writing different chapters in dissertation, Ethics in research & Communicating research.

Participant preparation

Prior to coming to the workshop, the participants are expected to share with DoE (epid@tnmgrmu.ac.in) their ‘Probable research topic’ in discussion with their guide. This would also facilitate the workshop organisers to provide appropriate examples & consolidate the candidate’s research work during the workshop.

Expected Outcome

The success of this WS will depend to a large extent on the creation of a Medical community capable of judging and conducting ‘quality Research’. To do so we will require the participants to engage actively throughout the course also plan its adoption in their institute. A strength as well a challenge of this course will be the diversity of candidates from mixture of specialties would be participate.
Pre test/Post test

Before starting the scientific sessions on day-1, each participant’s existing knowledge on research methods was assessed by pre-test and post-test was conducted at the end of workshop.

Evaluation

Each day a likert type questionnaire was given to students to assess the content, teaching method, etc. Also provision was provided to participants to comments on each session and their expectations on improving each sessions.

Learning Methods

The learning method used was lectures for technical inputs, recap presentation by participants on each day’s proceedings, small group discussions on development of Research question, choosing the right design, right statistical test, conducting literature search & organizing literature.

Recap

From second day, before starting the scientific session, two students did recap of the previous day sessions, by which faculty can understand what they learnt and understood the sessions covered on previous day.

Process of conduct of series of workshop

1. Training of Trainers (ToT)

In this regard, two Training of Trainers (ToT) workshop was conducted at Chennai and Madurai. From each government college two nodal person and one from private medical Colleges participated the ToT workshop. The nodal person was co-ordinate with the University faculty to conduct the workshop at their institution. The workshop was planned as per the below schedule.

<table>
<thead>
<tr>
<th>Venue</th>
<th>No of participants</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Tamil Nadu Dr.M.G.R.Medical University, Chennai</td>
<td>19</td>
<td>07.06.2017 to 09.06.2017</td>
</tr>
<tr>
<td>Aravind Eye Hospital, Madurai</td>
<td>28</td>
<td>21.06.2017 to 23.06.2017</td>
</tr>
</tbody>
</table>
2. **Conduct of workshop to Affiliated Institutions with support of above Trainees, DME, Dean & Vice principals.**

Post Graduate Students (MD/MS/DM/MCh) from the following medical institutions were participated this workshop.

1. Madras Medical College  
2. Stanley Medical College  
3. Kilpauk Medical College  
4. Chengalpet Medical College  
5. ESIC Medical College  
6. Karpaga Vinaya Institute of Medical Sciences and Research Centre  
7. Dhanalakshmi Srinivasan Medical College  
8. KAP Viswanathan Govt Medical College  
9. Tanjavur Medical College  
10. Chennai Medical College  
11. Madurai Medical College  
12. Aravind Eye Hospital  
13. Theni Medical College  
14. Govt Mohan Kumaramangalam Medical College  
15. Tirunelveli Medical College  
16. Coimbatore Medical College  
17. PSG Institute of Medical Sciences  
18. Karpagam College of Medical Sciences  
19. Kanyakumari Govt Medical College  
20. Sree Moogambika Institute of Medical Sciences
INAGURATION

The Hon’ble Vice-Chancellor Prof. Dr. S. Geethalakshmi inaugurated the workshops of “Research Methodology and Biostatistics: How to do good Dissertation and publish? ” for first year MD/MS Post Graduates at Tirunelveli Medical College, Madurai Medical College and Coimbatore Medical college. In her inaugural speech, Hon’ble Vice-Chancellor emphasized the need to conduct systematic Research in Health & disseminate the generated evidence through periodic publications. She said that it was for the first time such workshops are held away from Chennai & was optimistic that this initiative would improve quality of Research in Medical Sciences. She informed that University has made this Research workshop as mandatory to all first year Post graduates from Academic year 2017 - 2018. She assured all support to similar workshops will be conducted to all affiliated Medical colleges. She also addressed the participants attending series of workshops held in Chennai for colleges in and around Chennai.
The Schedule, venue & number of participants who participated from each medical college is given in the table:

<table>
<thead>
<tr>
<th>No</th>
<th>Name of College</th>
<th>Date</th>
<th>Venue</th>
<th>No of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tirunelveli medical college</td>
<td>22-24&lt;sup&gt;th&lt;/sup&gt; Aug 2017</td>
<td>Tirunelveli medical college</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Madurai medical college Aravind Eye Hospital</td>
<td>31&lt;sup&gt;st&lt;/sup&gt; Aug -2&lt;sup&gt;nd&lt;/sup&gt; Sep 2017</td>
<td>Madurai medical college</td>
<td>86+11</td>
</tr>
<tr>
<td>3</td>
<td>Sree Mookambika medical college</td>
<td>13-15&lt;sup&gt;th&lt;/sup&gt; Sep 2017</td>
<td>Sree Mookambika medical college</td>
<td>56+16+23</td>
</tr>
<tr>
<td>4</td>
<td>Coimbatore medical college</td>
<td>26-28&lt;sup&gt;th&lt;/sup&gt; Sep 2017</td>
<td>Coimbatore medical college</td>
<td>94</td>
</tr>
<tr>
<td>5</td>
<td>Madurai medical college Aravind Eye Hospital Theni Medical College</td>
<td>4-6&lt;sup&gt;th&lt;/sup&gt; Oct 2017</td>
<td>Madurai medical college</td>
<td>75+1+12</td>
</tr>
<tr>
<td>5</td>
<td>PSG Institute of Medical Sciences Coimbatore Medical College Karpagam medical college</td>
<td>11-13&lt;sup&gt;th&lt;/sup&gt; Oct 2017</td>
<td>PSG Institute of Medical Sciences</td>
<td>48+9+5</td>
</tr>
<tr>
<td>6</td>
<td>Thanjavur medical college and Chennai medical college</td>
<td>6-8&lt;sup&gt;th&lt;/sup&gt; Nov 2017</td>
<td>Thanjavur</td>
<td>72+8</td>
</tr>
<tr>
<td>7</td>
<td>KAP Viswanathan Govt medical college Joseph Eye Hospital and Dhanalakshmi medical college</td>
<td>8-10&lt;sup&gt;th&lt;/sup&gt; Nov 2017</td>
<td>KAPVGMc</td>
<td>97+4+8</td>
</tr>
<tr>
<td>No.</td>
<td>College Details</td>
<td>Dates</td>
<td>Venue Details</td>
<td>Total</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>-------</td>
<td>---------------</td>
<td>-------</td>
</tr>
<tr>
<td>8</td>
<td>The TN Dr.M.G.R.Medical University, Madras Medical College</td>
<td>14.11.2017-16.11.2017</td>
<td>The TN Dr.M.G.R.Medical University- senate hall</td>
<td>5+112</td>
</tr>
<tr>
<td>9</td>
<td>Stanley Medical College</td>
<td>14.11.2017-16.11.2017</td>
<td>Lecture hall, DoE</td>
<td>65</td>
</tr>
<tr>
<td>10</td>
<td>Madras Medical College, Stanley Medical College</td>
<td>21.11.2017-23.11.2017</td>
<td>The TN Dr.M.G.R.Medical University</td>
<td>96+69</td>
</tr>
<tr>
<td>11</td>
<td>Kilpauk Medical college</td>
<td>21.11.2017-23.11.2017</td>
<td>The TN Dr.M.G.R.Medical University</td>
<td>120</td>
</tr>
<tr>
<td>12</td>
<td>Kilpauk Medical college, Cancer Institute, ESI, Stanley Medical College, Karpaga vinayaga Institute of Medical Sciences, Chengalpet Medical College</td>
<td>04.12.2017-06.0-12.2017</td>
<td>The TN Dr.M.G.R.Medical University</td>
<td>47+14+5+2+21+6</td>
</tr>
<tr>
<td>13</td>
<td>CMC, Vellore, Govt Vellore Medical College</td>
<td>09.01.2018-11.01.2018</td>
<td>CMC</td>
<td>137+23</td>
</tr>
<tr>
<td>14</td>
<td>Govt Mohan Kumaramangalam Medical College, Salem</td>
<td>23.01.2018-25.01.2018</td>
<td>Govt Mohan Kumaramangalam Medical College, Salem</td>
<td>68</td>
</tr>
<tr>
<td>15</td>
<td>Missed candidates of all affiliated colleges</td>
<td>14.02.2018 -16.02.2018</td>
<td>The TN Dr.M.G.R.Medical University</td>
<td>195</td>
</tr>
</tbody>
</table>

About 1770 plus MD/MS/DM/Mch 1st Year Postgraduate candidates
Feed back from students about the workshop:

Positive feedback

✓ They appreciated the Vice-Chancellor Dr. S. Geethalakshmi Madam for taking this initiative (conduct of the workshop as mandatory, conduct in the first year itself and also away from Chennai)
✓ It was really useful - supports them to conduct more systematic research & publish
✓ Each Scientific sessions was excellent and understandable
✓ They very well understood, how to choose topic, how to develop research question, the components of research protocol including bio-statistics, how to cite reference using Zotero and Mendelay software etc.

Pre and Post test Score (Max: 20)

Average Pre test score is: 8.76
Average Post test score is: 18.55

Suggestions/feedback

✓ Duration may be increased as five days
✓ In few places, they felt their faculty & Ethical committee members should also be sensitized on Research methods
✓ They were not able to concentrate full day workshop due to night duty
✓ 6 month time frame to submit the title through online may be extended since many students are to develop the protocol & obtain ethical committee clearance
Honorable Vice-chancellor Inaugurated the Training of Trainers workshop on “Research Methodology and Biostatistics– How to do good dissertation and publish? conducted at Aravind Eye Hospital, Madurai.
Honorable Vice-chancellor released a workshop manual on: ‘Research Methodology and Biostatistics’ at Tirunelveli Medical college, Tirunelveli.
The first copy was received by Dean, TVMC.

Dr. G. Srinivas HOD, Department of Epidemiology, giving lecture on
Getting started: Research Topic and Research Question in the ToT Workshop on RMBS: How to do good Dissertation and Publish for the faculty
Participants and faculty of the Workshop on “Research Methodology and Biostatistics:- How to do good dissertation and publish? conducted at Madurai Medical College, Madurai

Participants and faculty of the Workshop on “Research Methodology and Biostatistics:- How to do good dissertation and publish? conducted at Sree Mookambika Institute of Medical sciences, Kulasekharam on 13th - 15th September 2017
PSG Dean Inaugurated the “Research Methodology and Biostatistics:- How to do good dissertation and publish?” conducted at PSG Institute of Medical sciences on 11th - 13th October 2019

Participants and faculty of the Workshop on “Research Methodology and Biostatistics:- How to do good dissertation and publish?” conducted at PSG Institute of Medical sciences on 11th - 13th October 2019
Honorable Vice-chancellor Inaugurated the Workshop on “RMBS: How to do good dissertation and publish?” at TNMGRMU for PG’s from MMC and SMC

Ethics in Medicine class was covered by External faculty from Delhi at PSG, Coimbatore
Honorable Vice-Chancellor Madam Inaugurating the Workshop on “Research Methodology and Biostatistics: How to do good dissertation and publish? conducted at Coimbatore Medical College on 26th - 28th September 2017

Participants presented their concept paper in the end of the day of the Workshop on “Research Methodology and Biostatistics: How to do good dissertation and publish? conducted at Thanjavur Medical College, Thanjavur
Participants present the recap of previous day scientific sessions of the Workshop on “Research Methodology and Biostatistics:- How to do good dissertation and publish? conducted at Thanjavur Medical College, Thanjavur

Certificate with 30 credit points were issued to the participants attending the workshop on “RMBS: How to do good dissertation and publish? by University at KAP Viswanathan Govt Medical College, Trichy
Participants attending the workshop on “RMBS: How to do good dissertation and publish? by University at CMC, Vellore
ACKNOWLEDGMENTS

With immense pleasure, we express our profound thanks to our Vice Chancellor Prof. Dr. S. Geethalakshmi, M.D., PhD., for her constant encouragement and support in all our departmental activities & guiding to conduct series of this workshop.

We acknowledge the contributions of all the faculty of medical colleges across Tamil Nadu who have contributed to the success of this workshop. Also, we would like to thank our Registrar Dr. Balasubramaniam M.S., D.L.O., for his guidance in all our activities. We hope that these workshops would promote ‘Quality Research’ by our postgraduates and will contribute for more Research publications.

We are indebted to Almighty who continues to guide us in all our efforts.

Staff of Department of Epidemiology,

The Tamil Nadu Dr. M.G.R. Medical University