



**REPORT ON
RESEARCH METHODOLOGY AND BIostatISTICS WORKSHOP HELD ON
20-09-2024**

**ORGANIZED BY:
DEPARTMENT OF EPIDEMIOLOGY
THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY**

The Department of Epidemiology, The Tamil Nadu Dr. M.G.R. Medical University conducted a comprehensive oneday online workshop on Research Methodology and Biostatistics from March 1 to September 20, 2024. The workshop was aimed at third-year MBBS undergraduate students from three medical colleges affiliated with the university.

The final session of the workshop was held on September 20 via virtual mode. A total of 350 students participated, representing Omandurar Medical College(100), Theni Government Medical College(100), and Kanyakumari Government Medical College(150). The sessions were coordinated by Nodal Officers from the Community Medicine departments of the respective medical colleges through virtual platforms. The presentations were delivered via LCD screens, ensuring a clear and engaging learning experience.

The workshop followed a structured format, starting with a QR code-based pre-test on Research Methodology and Biostatistics to assess the students baseline knowledge. The day continued with a series of informative and engaging lectures. At the end of each session,

students actively interacted with the speakers, seeking clarification and gaining deeper insights into the topics discussed. As the workshop concluded, students were provided with a QR code for a post-test and feedback survey, enabling them to evaluate their learning and give constructive feedback.

A total of 350 undergraduate students from the three medical colleges benefited from this enriching experience, enhancing their knowledge and skills in key areas of medical research and biostatistics.

KEY TOPICS COVERED IN THE WORKSHOP:

1. Research Ideas/Questions & Objectives
2. Searching and Organizing Literature
3. Research Designs
4. Basic Biostatistics in Health Research
5. Research Protocols

The workshop sessions were conducted by faculty from prestigious institutions:

- AIIMS (Nagpur)
- National Institute of Epidemiology, ICMR (Chennai)
- Private Research Organisations
- Madras Christian College
- Karpagam Faculty of Medical Science & Research(Coimbatore)

Kanyakumari Medical College



Government Theni Medical College



Government Omandurar Medical College



INTERACTIVE SESSIONS BY THE EXPERTS

The screenshot shows a Google Meet interface. The main content area displays a slide titled "RESEARCH OBJECTIVE" with the SMART acronym. The slide content is as follows:

S	M	A	R	T
Specific	Measured	Achievable	Relevant	Timed
Who, what, where, when, why	You can't improve what you don't measure	Challenging but not impossible	Closely connected to the objective	A completion date holds you accountable

Below the slide, a grid of participants is visible, including "guga priya", "MEETING TN...", "Velmurugan C...", "Malai Siva", "communitym...", "MEETING TN...", "Community m...", and "Susmitha Bas...".

The screenshot shows a Slido session interface. On the left, there is a QR code and the text "Join at slido.com #4108 603". The main content area displays a research question:

Change the research idea into a research question: Relation between social media use and health

Participants have asked the following questions:

- Anonymous: How much time spent by the medical students in relation to their academic performance
- Anonymous: In adolescents with increased social media usage, does it affect their mental health?
- Anonymous: How does using Social media constantly for 15 days (3 hours a day) affect the reasoning ability of a student
- Anonymous: How does Long term use of social media cause vision defect?

At the bottom, it indicates "↑ 2 new responses". On the right, a participant grid is visible, including "guga priya", "MEETING TN...", "Velmurugan C...", "Malai Siva", "communitym...", "MEETING TN...", "Community m...", and "Susmitha Bas...".

COMPARISON SCORES OF PRE-TEST & POST-TESTS

FIGURE 1: PRE-TEST SCORE

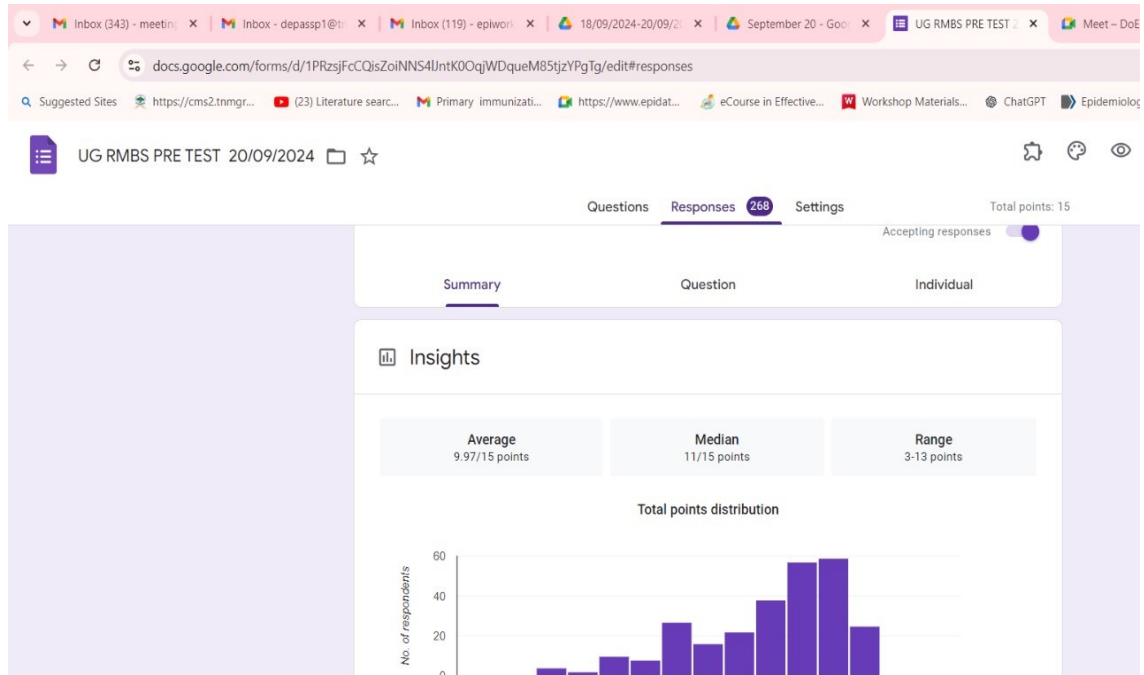
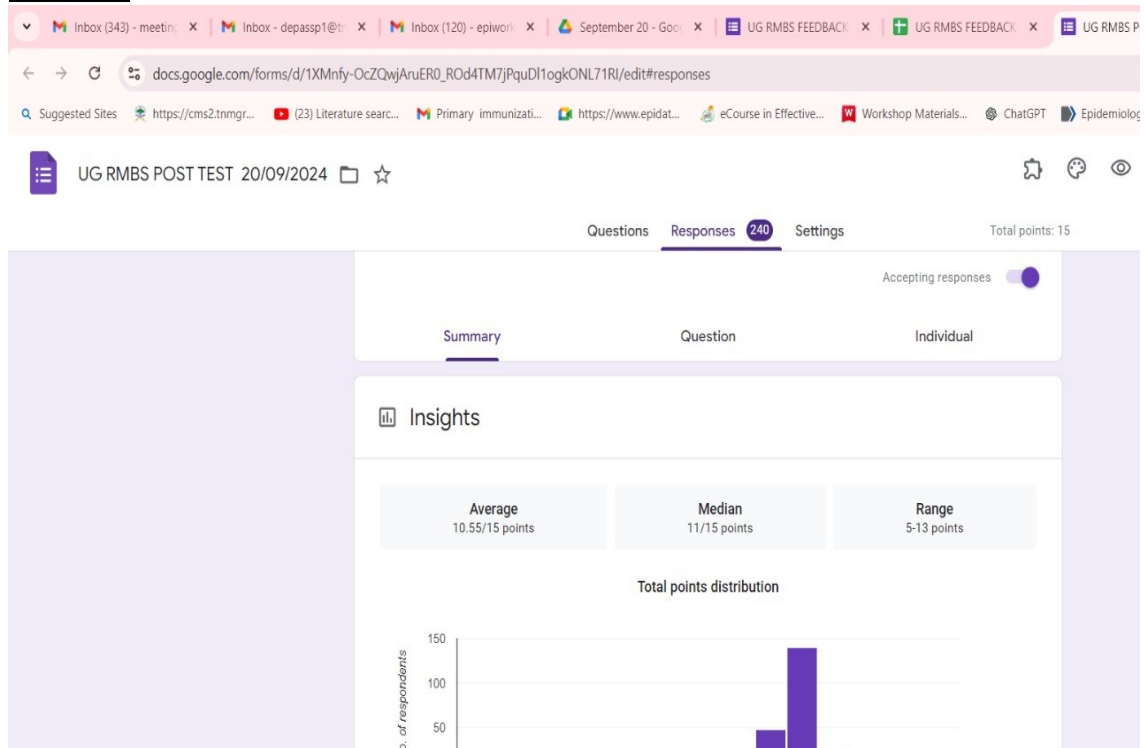


FIGURE 2: POST-TEST SCORE



OVERALL FEEDBACK FROM COLLEGE

The meticulously planned sessions were highly valuable to us as third-year MBBS students. Dr. Jasmine S. Sundar's introductory talk and clear workshop instructions laid the groundwork and generated interest for the subsequent sessions.

We extend our gratitude to Dr. Srinivas, Professor and Head of the Department of Epidemiology, for his clear and concise introduction to the fundamentals of health research. T.S. Guga Priya's presentation on "Research Ideas/Questions & Objectives" and Dr. Rizwan's discussion and demonstration on "Searching and Organizing Literature" were both incredibly useful.

Dr. Yuvaraj's session on "Research Designs" provided us with a thorough understanding of various methodologies, while Dr. Paridayal's talk on "Basic Biostatistics in Health Research" instilled in us the importance of handling health-related data for decision-making in research. The final session, far from being dull, was made engaging by Dr. Ilavenil, who presented on "Research Protocol." Her insightful inputs on the steps involved in constructing a research protocol left participants feeling confident and well-prepared to draft their own protocols.

After the final session, students were given post-tests via QR codes, followed by a feedback session. Dr. Jasmine S. Sundar's introduction of both the pretest and posttest helped us reflect on and reaffirm what we had learned during the workshop.

A special thanks to the presenters for introducing us to resources like PubMed and using interactive polling during the sessions on research ideas, study design, and protocol development. These practical demonstrations brought the topics to life and greatly enhanced our understanding.

Overall, this workshop provided us with essential insights and practical skills that will prove invaluable in our future academic and research endeavours. It equipped us with the knowledge and confidence needed to conduct effective literature searches and design research protocols, laying a strong foundation for our research careers.

