



KMCT
DENTAL COLLEGE
Accredited by NAAC with A+ Grade
Approved Research Centre of KUHS



INNOVATION AND
ENTREPRENEURSHIP
DEVELOPMENT CENTRE



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of Academic Initiatives)

KMCT Medical College Campus, Mukkam, Kozhikode - 673602

KMCT DENTAL COLLEGE

Value Added Course on **BASIC RESEARCH METHODOLOGY FOR BIOMEDICAL RESEARCH**

2nd 3rd 4th February 2023

KDC Credit Points Awaited

Organized by

**IQAC & Dept. of Public Health Dentistry - KMCT Dental College
in association with
Dept. of Community Medicine - KMCT Medical College**

**Venue: KMCT Dental College
7th floor Lecture Hall 4**

OBJECTIVES OF THE WORKSHOP

The Objective of this course is to enhance the knowledge in fundamentals of Research Methodology. The workshop aims at building capacity among researchers regarding scientific ways of formulating research questions, adopting proper study designs, sampling tools, learning data management in broader perspective along with rules and regulations of protocol writing. It will enable the Researchers to develop the most appropriate methodology for their Research Studies.

TOPICS COVERED

1. Introduction to research
2. Literature search
3. Developing research question and hypothesis
4. Study designs
5. Developing research protocol
6. Sample size estimation
7. Data management
8. Research ethics
9. Biostatistics- Basic to advanced
10. Hands on Research software- SPSS
11. Evidence based dentistry

TEACHING AND LEARNING METHODS

- Live classes by eminent faculty
- Classroom and home assignments
- Hands-on training on softwares
- Individual attention and doubt clearing sessions

ORGANIZING COMMITTEE

CHIEF PATRON

Dr. K. Moidu

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Dr. Navas K. M.

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Professor & HOD- Dept of Public Health Dentistry

ORGANIZING SECRETARY

Dr. Arun Paul

Reader - Dept of Public Health Dentistry

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Dr. Manju TL

Dr. Nivya NK

Dr. Zainul Ameen CK

Dr. Amutha

Dr. Navya G

Mr. Durgesh

Mr. Sujesh



Dr. Bindu Mohandas

Professor

Department of Community Medicine, KMCT Medical College

2nd February 2023

8.30 - 9.30 AM

Session 1

Introduction to Medical Research & framing a Research hypothesis

To understand the historical background of Medical Research, its advantages and how to frame a research question

12.15 - 1.00 PM

Session 5

Literature search

To discuss the Background and Rationale

Understand Research gap and learn different referencing systems

KUHS rules and regulations for protocol (procedure to submit synopsis to University and how it is processed)



Dr. Anupama A

Assistant Professor

Department of Community Medicine, KMCT Medical College

2nd February 2023

10.00 - 10.30 AM

Session 2

STUDY DESIGNS:
Descriptive Designs

To discuss Case study, Case series and Cross-sectional study and to learn the Concept of hypothesis



Dr. Dhanya Muralidharan

Professor & H.O.D

Department of Public Health Dentistry, KMCT Dental College

2nd February 2023

10.30 - 11.15 AM

Session 3

STUDY DESIGNS:
Case control study designs

To discuss Case control study, the steps involved and various bias associated

11.30 - 12.15 AM

Session 4

STUDY DESIGNS:
Cohort study designs

To discuss Cohort study, the steps involved and various bias associated

Assigned Faculty

2nd February 2023

2.00 - 2.30 PM

Session 6

Assignment: Literature search and designs

The assignment is to prepare a PPT-

For an introduction for the "given" objective

Collect relevant articles and Referencing in Vancouver style

Decide on the appropriate study design for the objectives of the study



Dr. Shaikh Ubedulla S.I.D

Professor & H.O.D

Department of Pharmacology, KMCT Medical College

2nd February 2023

2.30 - 3.30 PM

Session 7

Randomized Controlled Trials

To explore the steps in RCT

To discuss Blinding, Randomization and Ethical issues

To discuss Intention to Treat Analysis, Number needed to treat and types of RCTs

4th February 2023

11.45 - 12.45 PM

Session 4

Medical research ethics

To discuss the Ethical principles in research



Dr. Arun Paul

Reader

Department of Public Health Dentistry

3rd February 2023

2.00 - 3.00 PM

Session 5

Concept of sampling and Sample size

To discuss the Concept of sampling and Application of Sample size calculation formulas

4th February 2023

8.30 - 9.30 PM

Session 1

Softwares in Research
Introduction to SPSS

Hands on exercise of MS Excel, SPSS software & others



Guest faculty

Dr. Biju George

Associate Professor

Department of Community Medicine, Government Medical College Kozhikode

3rd February 2023

8.45 - 9.30 AM

Session 1

Descriptive statistics

To discuss what is bio-statistics, Variables, Mean/Median/SD/IQR

09.30 - 10.15 AM

Session 2

Concept of confidence interval

To discuss about normal distribution and its properties, Concept of standard error and confidence interval

10.30 - 11.30 AM

Session 3

Testing of Hypothesis

To explore various Statistical tests, Bias, Type I, type II errors, Concept of P value

11.30 - 1.00 PM

Session 4

Statistical tests

To learn various Statistical tests and interpretation (chi-square, t tests, ANOVA, Non-parametric tests) Sensitivity, specificity, PPV, NPV, ROC curve, Risk estimates, Kaplan-Meier, Regression



Guest faculty

Dr. Subramaniam R

Professor & H.O.D

Department of Public health dentistry, Indira Gandhi Institute of Dental Sciences

4th February 2023

9.30 - 10.45 AM

Session 2

Evidence Based Dentistry

To discuss Evidence based health care its principles and hierarchy of learning

Assigned Faculty

3rd February 2023

3.00 - 3.45 PM

Session 6

Assignment

End of the day Assignment PPT: Determining the sample size and appropriate statistical tests for the study



Dr. Meera S Nair

Associate Professor

Department of Community Medicine, KMCT Medical College

4th February 2023

11.00 - 11.45 AM

Session 3
Questionnaire preparation

To discuss the principles involved in preparing Questionnaires

All Faculty

3rd February 2023

1.45 - 3.15 PM

Session 5
Protocol Discussion

Thesis protocol modifications / corrections

Valedictory 3.15 - 4.00 PM

FOR REGISTRATION, PLEASE CONTACT

Dr. Dhanya Muralidharan ☎ 8281 031 234, Dr. Arun Paul ☎ 9538272488

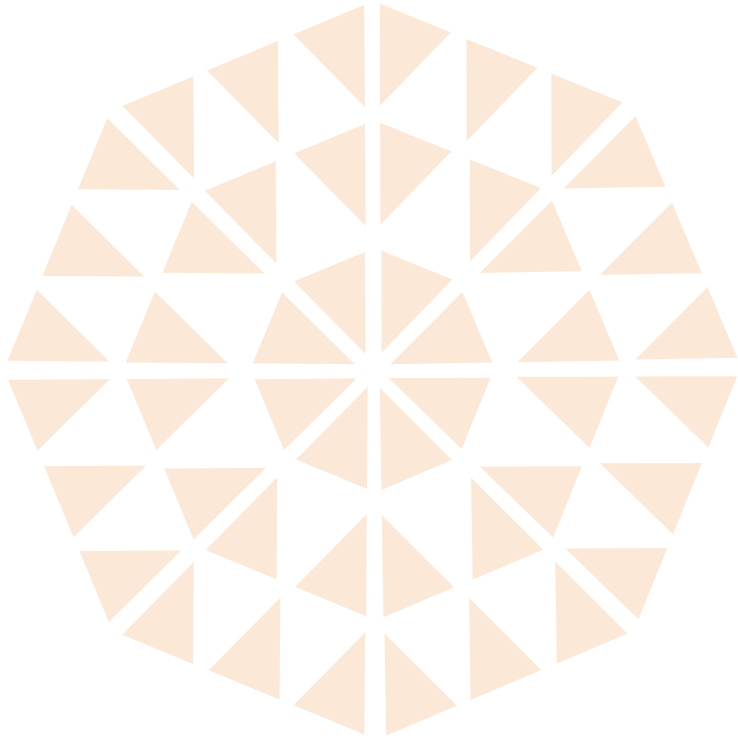
**Registration fee: ₹ 2000
(including Lunch, tea and snacks)**

Last date for registration : 30-01-2023

Account Details

**Account Name : CDE Account , Acc. No : 210110100076310
IFSC Code : UBIN0821012, Branch : Manassery**

Please WhatsApp the transaction id to Dr. Arun Paul (9538272488) after payment



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