



TAGORE MEDICAL COLLEGE & HOSPITAL

Rathinamangalam, Melakkottaiyur Post, Chennai - 600127.
Phone : 044-30101111, Fax : 044-222 5555, Email: tagoremch@gmail.com



(Affiliated to the Tamil Nadu Dr.MGR Medical University & Recognized by the Ministry of Health & Family welfare. Govt. of India New Delhi)

PROGRAM / EVENT REPORT	
Name of the program	Mastering sample size in Research
Date and Time	26.02.2026, 8.30 am - 3.30 pm
Venue	MEU Room Ground floor, Tagore medical college block.
Target audience	HODs and Faculty members of all Departments, TMCH
Number of Participants	61
Program Organised by	Department of community medicine and IQAC
Resource person	Dr. Saravana kumar. V
Objective of the Program	To familiarize the HODs and Faculty members with Mastering sample size in Research

Detailed report of the program

A Faculty Development Programme (FDP) session on "Mastering Sample Size in Research" was conducted with the objective of strengthening research competencies among faculty members. The session aimed to enhance participants' understanding of scientific sample size determination and its critical role in ensuring the validity, reliability and ethical integrity of research studies. Research quality largely depends on appropriate planning and sample size calculation is one of the most fundamental components of research methodology. The session began with an overview of the importance of selecting an adequate sample size. It was emphasized that an insufficient sample may result in underpowered studies, leading to inconclusive or misleading results, while an excessively large sample may waste resources and pose ethical concerns.



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Therefore, determining the correct sample size is not arbitrary but based on statistical principles. The resource person explained essential statistical concepts that influence sample size calculation, including population and sample, Type I error (α), Type II error (β), statistical power, effect size, standard deviation, and confidence intervals. These concepts were illustrated using practical examples relevant to educational and clinical research settings. The relationship between power (commonly set at 80% or 90%) and significance level (usually 0.05) was discussed in detail to help participants understand how these parameters influence the required number of study subjects. The session further covered sample size estimation for various research designs. For descriptive studies, the formula for estimating proportions was explained. For analytical and experimental studies, methods for calculating sample size when comparing two means, two proportions, or assessing correlations were discussed. The importance of clearly defining the primary outcome variable before performing any calculation was strongly emphasized.

After the session by the speaker, there was a Q & A interaction with the participants for sharing their experiences and insights. All questions and clarifications regarding the topic were addressed by the speaker. Following which, feedback forms were collected from all the participants regarding the program. The session came to an end with a vote of thanks by Dr. Kowsalya, Assistant Professor, community medicine department. The faculty development program on Mastering sample size in Research was a resounding success, achieving its objectives of enhancing knowledge and awareness among HODs and faculty members. The program has laid the foundation for a more rigorous approach and a detailed plan among the faculty for climbing the ladder of educational leadership.



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Photos



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Certificates

 TAGORE MEDICAL COLLEGE AND HOSPITAL <i>(Affiliated to The Tamil Nadu Dr. MGR Medical University)</i> DEPARTMENT OF COMMUNITY MEDICINE <u>CERTIFICATE OF PARTICIPATION</u> <i>This is to certify that Dr. S. ABIRAMI SUNDHARI has participated in Faculty development programme of Mastering sample size in Research held on 26th Feb 2026 organized by the Department of Community Medicine of Tagore Medical College & Hospital, Rathinamangalam, Chennai.</i> Dr. Ravichandran Doraiswamy, MBBS, MD (Anat), PGDHS, DABRM Dean, TMCH Dr. D.H.GOPALAN, M.S, Ph.D, ACME, Vice Principal, TMCH Prof. Dr. S. Habeeb Mohammed, MS, FIAGES, FAIS, FBS, DIP. LAP Medical Superintendent, TMCH Dr. Prabakaran, MD Professor and head, Department of community Medicine, TMCH
<i>(Name filled and with signatures)</i>

 Organising Chairperson Department of Community Medicine Tagore Medical College & Hospital Rathinamangalam, Melakottaiyur P.O. Chennai-600 127.	 DEAN TAGORE MEDICAL COLLEGE AND HOSPITAL RATHINAMANGALAM, MELAKOTTAIYUR Chennai-600 127.
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Suggested enclosures: