

M.C.E. Society's

M.A. RANGOONWALA COLLEGE OF DENTAL SCIENCES & RESEARCH CENTRE, PUNE

Recognized by Dental Council of India & Affiliated to MU.H.S. Nashik

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CODE OF ETHICS FOR RESEARCH

1. Introduction:

A code of ethics for research serves as a crucial set of principles and guidelines that researchers must follow to ensure the ethical conduct of their work. It not only outlines their responsibilities but also sets the standards that should be upheld throughout the research process. By providing a framework for ethical decision-making, it safeguards the welfare and rights of participants while upholding the integrity and credibility of the research.

The primary objective of a code of ethics for research is to safeguard the rights, dignity, and well-being of research participants. Additionally, it plays a vital role in maintaining public trust by ensuring that research is carried out with utmost integrity, honesty, and transparency. This code serves as a valuable tool for researchers, helping them navigate the complexities of ethical issues that may arise during their research endeavors.

In summary, a code of ethics for research is an essential component of any study. It not only protects the rights of participants but also upholds the integrity of the research process, ensuring that it is conducted in a professional and ethical manner.

1.2 The Key Elements and Objectives of the institute's code of ethics for research are as follows

Respect for Human Dignity: Researchers are obligated to uphold the inherent value and independence of individuals, treating them with fairness, respect, and sensitivity. This entails obtaining informed consent from participants, safeguarding confidentiality, and protecting their privacy.

Beneficence and Non-maleficence: Researchers have a responsibility to enhance the benefits and reduce the potential harm to both participants and society. It is crucial for them to thoroughly evaluate the potential risks and benefits associated with their research and take necessary measures to mitigate any adverse effects.



Justice and Equity: Research ought to be carried out in a manner that is both fair and equitable. It is the responsibility of researchers to ensure that the advantages and disadvantages

of research are distributed fairly, while also avoiding any kind of discrimination or bias when selecting participants.

Integrity and Honesty: It is imperative for researchers to approach their work with unwavering honesty, integrity, and transparency. They must diligently and accurately document their methods, results, and conclusions, while steadfastly avoiding any semblance of plagiarism or data fabrication. Upholding these principles is not only a moral obligation but also a fundamental requirement for maintaining the credibility and trustworthiness of scientific research.

Responsible Conduct: Researchers are expected to uphold the utmost standards of scientific integrity and responsible conduct. This entails guaranteeing the reproducibility of research, appropriately utilizing and acknowledging the contributions of others, and transparently disclosing any conflicts of interest.

Compliance with Laws and Regulations: It is imperative for researchers to adhere to the applicable laws, regulations, and institutional policies that govern research. This includes obtaining the required approvals, permissions, and ethical clearances. Ensuring compliance not only upholds the integrity of the research but also safeguards the rights and well-being of all involved parties.

Responsible Use of Resources: Researchers are expected to utilize research resources, including funding, equipment, and data, in a responsible and efficient manner, ensuring their appropriate management and utilization.

Accountability and Oversight: Researchers must be held accountable for their actions and remain open to scrutiny and evaluation. It is crucial for them to actively engage in ethical review processes, such as the Institutional Ethical Committee, and seek guidance whenever confronted with ethical dilemmas. Enhanced accountability and oversight are essential components of a professional and responsible research environment.

2. Purpose of the research committee

The primary objective of the research committee is to establish a conducive environment for conducting high-quality research, promote collaboration among members, and contribute to the advancement of knowledge within the organization. Additionally, the committee is committed to safeguarding the best interests of the participants involved.



- 2.1. Promoting Research Excellence: The committee's primary objective is to uphold and promote the highest standards of research quality within our organization. To achieve this, the committee establishes comprehensive guidelines, policies, and best practices that guarantee all research conducted within our organization adheres to rigorous standards. By setting these stringent standards, we ensure that our research endeavors are of the utmost quality, fostering credibility and trust among our stakeholders. The committee's dedication to excellence serves as a driving force behind our organization's commitment to producing reliable and impactful research outcomes
- 2.2. Facilitating Research Collaboration: The committee's primary objective is to cultivate a culture of collaboration among researchers both within our organization and with external partners. By promoting interdisciplinary research initiatives, encouraging knowledge sharing, and facilitating networking opportunities, we aim to enrich the research environment and foster meaningful partnerships. Our committee is dedicated to fostering a collaborative atmosphere that transcends organizational boundaries. We firmly believe that by bringing together diverse perspectives and expertise, we can unlock innovative solutions to complex challenges. To achieve this, we actively encourage researchers to engage in interdisciplinary projects, breaking down silos and promoting cross-pollination of ideas
- 2.3. Funding and Resource Allocation: The committee holds the responsibility of evaluating research proposals and distributing resources, including funding, equipment, and facilities, to support approved projects. Its primary objective is to ensure equitable and transparent procedures for grant applications, while also overseeing the efficient utilization of allocated resources. By carefully assessing research proposals, the committee determines which projects are deserving of financial support and other necessary resources. This evaluation process guarantees that only the most promising and impactful initiatives receive funding, thereby maximizing the committee's investment in research and development.
- **2.4. Ethical Oversight:** The committee is responsible for ensuring that all research conducted within the organization strictly adheres to ethical guidelines and regulations. It meticulously reviews research protocols involving human subjects or animals, closely monitors compliance with ethical standards, and guarantees the protection of participants' rights and welfare.
- 2.5. Research Policy Development: The committee plays a vital role in shaping and executing research policies within our organization. It remains constantly informed about emerging



trends, funding prospects, and regulatory modifications in the research field. By doing so, it provides valuable guidance on strategic pathways to propel our organization towards achieving its research objectives.

Our committee actively contributes to the development and implementation of research policies, ensuring that they align with the organization's overarching goals. By staying abreast of the latest advancements and opportunities in the research landscape, we are able to make informed decisions that drive our research initiatives forward.

- 2.6. Research Dissemination and Impact: The committee actively facilitates the widespread sharing of research findings through various channels such as conferences, publications, and other effective means. It strongly encourages researchers to effectively communicate their work to diverse audiences, including both academic and non-academic communities. The ultimate goal is to amplify the impact and enhance the visibility of research outcomes.
- 2.7. Research Training and Professional Development: The committee is dedicated to fostering the growth of researchers through the organization of engaging workshops, seminars, and comprehensive training programs. Our aim is to provide researchers with valuable opportunities to enhance their research skills, remain abreast of the latest advancements in their respective fields, and cultivate a culture of continuous learning.
- 2.8. Evaluation and Monitoring: The committee is responsible for evaluating the progress and outcomes of research projects, assessing their impact, quality, and compliance. To ensure that research activities align with organizational objectives and meet predefined standards, the committee may conduct periodic reviews, audits, or assessments. These evaluations play a crucial role in the successful execution and advancement of scientific knowledge in any research project or clinical trial. By actively evaluating and monitoring research projects, the committee ensures that they are on track and meeting the desired outcomes. This involves assessing the impact of the research, examining its quality, and ensuring compliance with established guidelines. Through periodic reviews, audits, and assessments, the committee maintains a vigilant eye on the research activities, guaranteeing that they align with the organization's objectives.

3. Role of a researcher in any original study/clinical trial

A researcher is a professional who conducts scientific investigations and studies pertaining to oral health, dental diseases, dental treatments, and dental materials. Their role is crucial in



advancing knowledge within the field of dentistry and enhancing oral healthcare practices. Researchers are responsible for formulating research questions, defining objectives, and developing detailed study protocols. Prior to commencing a new study, researchers conduct a comprehensive review of existing literature and research to gain insights into the current state of knowledge on the subject and identify gaps that their study can address.

In clinical trials and various research studies, researchers play a crucial role in recruiting appropriate participants. They are responsible for overseeing the data collection process, which may include administering surveys, conducting interviews, performing medical tests, or observing participants' behavior, depending on the study's nature. Once the data is collected, researchers employ statistical and analytical methods to interpret the findings.

Researchers are tasked with the crucial duty of meticulously documenting their findings and meticulously preparing research papers or reports. These invaluable pieces of work are then submitted to esteemed scientific journals or presented at prestigious conferences, allowing for the dissemination of results within the academic and scientific community. Throughout the entire research process, researchers must unwaveringly adhere to a set of stringent ethical principles and guidelines. This entails safeguarding the privacy and confidentiality of participants, obtaining informed consent, and thoughtfully considering potential risks and benefits. Furthermore, researchers bear the responsibility of upholding the utmost quality and integrity of their studies.

In clinical trials, researchers play a crucial role in testing novel medical treatments or interventions to assess their safety and effectiveness. The data collected from these trials are of utmost importance in obtaining regulatory approval for new drugs or therapies, ultimately resulting in enhanced healthcare practices and improved patient outcomes.

Researchers play a crucial role in advancing knowledge, enhancing healthcare practices, and contributing to the scientific community as a whole. Their unwavering dedication and specialized expertise are indispensable in propelling progress and fostering innovation within the dental field.

4. Misconduct in Research

a. Plagiarism and Copyright Infrigement:

Plagiarism in research is the act of presenting someone else's ideas, words, data, or work as one's own without giving proper acknowledgment or citation. This unethical practice is widely condemned in academic and scientific communities as it undermines the fundamental principles of intellectual honesty, academic integrity, and the relentless pursuit of knowledge.



Copying and pasting content verbatim from a source without providing proper attribution is the most flagrant manifestation of plagiarism, and it can be readily identified through plagiarism detection software. Additionally, plagiarism encompasses the act of incorporating one's own previously published work or portions thereof into a new research paper without duly acknowledging the source.

Rewriting someone else's work or ideas without proper citation or giving credit, even if the structure or wording is changed, constitutes plagiarism.

Plagiarism can occur unintentionally when individuals lack understanding of proper citation practices or have inadequate knowledge of the subject matter. However, it is important to note that ignorance is not an excuse. Researchers are expected to be diligent in their efforts to provide appropriate credit to the original sources.

In order to prevent plagiarism, researchers must ensure that they appropriately cite all sources they utilize, whether it be direct quotes, paraphrased content, or ideas borrowed from others. It is recommended that researchers adhere to citation styles or reference systems endorsed by their academic institutions or publishers, such as the Vancouver or Harvard system. Additionally, it is crucial to make the use of plagiarism detection tools mandatory to thoroughly examine manuscripts prior to submission.

Plagiarism in research refers to the act of presenting someone else's ideas, words, data, or work as one's own without proper acknowledgment or citation. It is considered a serious ethical violation in academic and scientific communities and undermines the principles of intellectual honesty, academic integrity, and the pursuit of knowledge.

Copying and pasting word-for-word from a source without giving proper attribution is the most blatant form of plagiarism and is easily detectable with plagiarism detection software. Plagiarism also involves reusing one's own previously published work or parts of it in a new research paper without appropriate citation.

Even if the structure or wording is changed rewriting someone else's work or ideas without proper citation or giving credit, so it appears as original content also constitutes plagiarism

Plagiarism can occur unintentionally due to a lack of understanding of proper citation practices or inadequate knowledge of the subject matter. However, ignorance is not an excuse, as researchers are expected to be diligent in their efforts to provide appropriate credit to the original sources.

To avoid plagiarism, researchers must properly cite all sources they use, including direct quotes, paraphrased material, and ideas taken from others. Citation styles or references systems recommended by their academic institutions or publishers (e.g., Vancouver, Harvard system)



should be used. Plagiarism detection tools need to be made compulsory to check the manuscript before submission.

The institute uses the **OURIGINAL BASIC(Urkund- Anti Plagarism software)** to check plagiarism in unpublished manuscripts. (**Renewal Invoice No2022/EG/1057 dated 20/9/2022).** A demo session on how to use the software was organized for the faculty by the software providers on September 18, 2020

The right not to be plagiarized is not recognized by the law in India, but the section 57 of the Indian Copyright Act, 1957 gives authors the right to claim authorship of their works. Section 63 of the Indian Copyright Act, 1957 considers infringement as the criminal offence and awards punishment of six months to three years along with monetary compensation under the Copyright Act.

b. Intellectual Property theft:

Intellectual property theft in research refers to the unauthorized use, reproduction, or distribution of someone else's intellectual property, such as patents, copyrights, trademarks, or trade secrets, within the context of academic or scientific research. The above mentioned Plagiarism is a form of Intellectual Property theft. Using Images/tables/figures without giving acknowledgement to the author and using patent technology or methods without permission or license also encompass Intellectual Property theft. Intellectual property theft in research can have serious consequences for both individuals and institutions involved. Intellectual Property theft, though challenging is governed by various acts like the Copyright Act 1957, the Patent Act 1950 and the trademarks act 1999. It can lead to damaged reputations, legal action, loss of funding, and hindered progress in scientific advancements.

5. Role of department and or institution in research

5.1 Board of Research Studies: The Board Of Research Studies (BORS) was established on July 2017. The research committee holds quarterly meetings in January, April, July, and October. A minimum of five people must be present for the meeting to proceed. Each department appoints a subject expert to serve as a committee member. When defending a research project submitted by an undergraduate or postgraduate student, the presence of their respective guides is mandatory. The participant's consent is crucial before proceeding with the research project or clinical trial. The Institutional Ethics Committee (IEC) formulates and approves the consent form. Two weeks before the committee meeting, a notice is displayed for the submission of synopses for research projects or clinical trials. During the meeting, the research project is discussed, and if necessary, it is submitted to the IEC for approval.

5.2 IEC



The MCE Society's ethics committee was formulated on 7 Jan, 2007 and was registered with the DCGI & DHR on EC/NEW/INST/2023/MH/0241 dated 28th September 2020. The institutional ethic committee meets twice in a year as per institutional requirements. The students are encouraged and advised to register their projects at CTRI.

5.3 Financial support in research

The institute actively encourages and promotes its students to apply for a wide range of research grants offered by both government and non-government bodies. Additionally, the institute itself provides research grants to its teaching faculty and students who are pursuing Ph.D., postgraduate, and undergraduate degrees. These grants are disbursed after undergoing a rigorous evaluation process by the Board of Research and Studies (BORS) and the Institutional Ethics Committee (IEC), taking into consideration the translational component and eligibility criteria.

Upon approval of the research project, 50% of the grant amount is released, with the remaining 50% being disbursed upon submission of the completed research project. It is worth noting that if any faculty or student member of the institute receives a grant from an external source, they are required to donate 30% of the amount to the parent institute.

5.4 Data Management in research

After approval of the research project by BORS & IEC it is mandatory for all the investigators concerned with said research project to sign a letter of confidentiality/undertaking stating that the collected and analyzed data shall be the intellectual property right of the parent institute in the event of withdrawal/removal of any of the investigators from the study or in case/termination from the institute.

Taking research findings or inventions from a research institution and using them for commercial purposes without the proper agreements or permissions in place is Intellectual Property theft and is punishable under the Indian Copyright 1957.

The data for the study is a property of the Participant/patient and the institution. The Patient has the right to withdraw from the study and with-hold the data from presentation/publication if he needs to.

The researcher should refrain from allowing sponsors to jeopardize reporting of the results and/or with-hold any data to their advantage. Full disclosure of the data collected and analyzed is expected from the investigators.



The unpublished manuscript of any research project undertaken by any student (UG/PG) during their course tenure has to be submitted to the research committee, failing which their no dues shall be withheld.

5. Collaborative Research:

Collaborative research involves the cooperation and participation of multiple individuals, institutions, or organizations within the field of health and medicine. Our institute strongly advocates for a collaborative research approach, as it allows us to leverage the expertise, resources, and diverse perspectives of different stakeholders to address complex issues related to dental health. Each member contributes their unique skills, knowledge, and methodologies to the research project, resulting in more comprehensive and impactful outcomes.

To ensure a smooth collaboration, it is essential for both parties to sign a Memorandum of Understanding and an official letter that clearly outlines the terms and conditions of the research project. This step helps establish a solid foundation and ensures everyone is on the same page. Additionally, our institute promotes interdisciplinary research within dentistry, recognizing the valuable contributions of all researchers involved in the publication and presentation of research findings.

Collaborative research serves as a bridge between laboratory discoveries and real-world applications, ultimately benefiting society as a whole. By harnessing the power of collective expertise and resources, we can develop innovative solutions that have a tangible impact on improving dental health. Our commitment to collaborative research underscores our dedication to advancing the field and making a meaningful difference in people's lives

Conclusion:

The Code of Ethics serves as the foundation of our unwavering commitment to conducting research with the utmost integrity, honesty, and respect for all stakeholders involved. It is through this code that we ensure our pursuit of knowledge is guided by ethical principles, ultimately contributing positively to society while safeguarding the rights and well-being of individuals.

Ethical research goes beyond a mere set of rules; it is a reflection of our shared values and responsibilities as researchers. Failing to adhere to these ethical standards not only puts the credibility of our research at risk but also undermines the trust of our colleagues, institutions, and the wider public.



It is important to note that this Code is not fixed; it will evolve alongside our growing understanding of ethical challenges in research. We actively encourage open discussions, transparency, and a culture of accountability within the research community. By fostering an environment that promotes dialogue and responsibility, we can collectively address and overcome ethical dilemmas that may arise.

In summary, our Code of Ethics is the cornerstone of our commitment to conducting research with integrity, honesty, and respect. It is a reflection of our shared values and responsibilities as researchers, ensuring that our work positively contributes to society while upholding the rights and well-being of individuals. We recognize the importance of continuous improvement and encourage open discussions and accountability within the research community.

References:

- 1. https://ethics.ncdirindia.org/asset/pdf/ICMR National Ethical Guidelines.pdf
- 2. https://www.ugc.gov.in/e-book/Academic%20and%20Research%20Book WEB.pdf