EDITORIAL

BUILDING ETHICAL FOUNDATIONS: INTEGRATING ETHICS INTO THE DENTAL CURRICULUM

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INTRODUCTION

Like medicine, dentistry relies on the Hippocratic principleattributed to an ancient known Greek Physician. It necessitates dentists to prioritize patients' welfare, acting in their best interest and providing appropriate care. The dentists, therefore, are expected to adhere to professional standards; including competency, honesty, and integrity.In modern-day dentistry, research has developed as an integral component for dentists. Their research must exhibitan ethical standard that gives high value to respect for a person [1].In addition to offering relevant courses on clinical and non-clinical sciences and clinical skills, an undergraduate dental program should incorporatethe values and attitudes of the profession[2]. In many countries, a course on Medical Ethics is pessimistically found missing from the undergraduate curriculum of dental studies. As a consequence, dental professionals were found short of knowledge regarding research ethics in an Indian pilot study [3].A study, in its electronic survey, found that a course on ethics was not included in research courses creating ethical issues in the reported studies. It may lead to negative effects on academics and dental professionals[4].

Research Ethics in dentistry encompasses the principles and guidelines that govern the ethical conduct of research involving dental patients, human subjects, animals and the dental profession as a whole. These guidelines ensure that dental research is conducted in a manner that respects the rights, welfare, safety and dignity of participants while promoting scientific integrity and the advancement of dental knowledge. Incorporating these concepts into the undergraduate dental curriculum is essential for educating future dentists about the ethical principles, responsibilities and challenges associated with research. The other reasons to integrate it into the BDS curriculum include;

Scientific Integrity

Research Ethics emphasizes the principles of honesty, transparency, and accuracy in scientific investigations. It teaches students about responsible research practices, including proper data collection, analysis, interpretation, and reporting. Dental students need to understand the ethical implications of data manipulation, plagiarism, and fraudulent practices to maintain the integrity of the scientific community.

Professional Development

Incorporating Research Ethics into the dental curriculum promotes the professional development of upcoming dentists. It helps them understand the ethical dilemmas that may arise during their careers and equips them with the skills to make informed, ethical decisions. Research Ethics education fosters

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professionalism, integrity and accountability, which are crucial attributes for future dental practitioners.

Evidence-Based Dentistry

Ethical research is the foundation of evidence-based dentistry. Dental professionals must be able to critically evaluate research literature and apply evidence-based practices to patient care [5]. By integrating research ethics into the curriculum, dental students gain a deeper understanding of the ethical considerations involved in research design, data collection, and analysis. This knowledge enables them to assess the quality and reliability of research findings and make evidence-based decisions for their patients.

Protection of Human Subjects

Research involving human subjects, including patients, must prioritize their welfare, safety, and rights [6]. By educating dental students about research ethics, they develop an understanding of the importance of informed consent, confidentiality, privacy, and the ethical treatment of human participants. This knowledge ensures that future dental professionalsethically conduct research, respecting the rights and well-being of their patients.

Regulatory Compliance

Dental research is subject to various regulatory frameworks and ethical guidelines. Including research ethics in the undergraduate curriculum ensures that dental students are aware of these regulations and guidelines, such as the Declaration of Helsinki, Belmont Report, and Good Clinical Practice guidelines. Compliance with these standards is necessary to conduct research ethically and protect the rights and well-being of research participants. A course on research ethics characteristically covers a wide range of topics to provide students with a comprehensive understanding of the ethical considerations and principals involved in conducting research. Significant aspects of research ethics in dentistry include informed consent, confidentiality, and beneficence, and non-maleficence, research integrity approval from the institutional review board (IRB).

Informed Consent

Researchers must obtain voluntary, informed consent from participants before they can include them in a study. Participants should be fully informed about the purpose, procedures, potential risks, benefits, and alternatives to participation in the research. Informed consent ensures that individuals have the autonomy to make an informed decision about their participation.

Confidentiality

Researchers have an ethical duty to protect the privacy and confidentiality of participants. Identifiable information should be kept secure and should only be accessed by authorized personnel. Researchers should take appropriate measures to ensure that data are anonymized or de-identified when reporting research findings to maintain participant confidentiality.

Beneficence

Researchers should strive to maximize the benefits and minimize the potential harms associated with research. This includes considering the potential risks to participants and taking steps to mitigate them. Research should be designed in a way that maximizes potential benefits while minimizing harm to participants.

Non-Maleficence

Researchers must ensure that the research does not cause unnecessary harm or distress to participants. Any potential risks should be carefully considered and balanced against the potential benefits. Researchers should take steps to minimize physical, psychological, and social harm to participants throughout the research process.

Research Integrity: Ethical research in dentistry requires the highest standards of integrity and scientific rigor. Researchers should adhere to established scientific principles and standards when designing, conducting, and reporting research. They should accurately report their findings, avoid fabrication or falsification of data, and disclose any conflicts of interest that may influence the research.

Institutional Review Board (IRB) Approval
Dental research involving human participants often requires review and approval by an IRB or Ethics Committee. The IRB ensures that research protocols meet ethical standards and protect the rights and welfare of participants. Researchers should obtain necessary approvals before initiating any research involving human subjects.

A single semester course work consisting of lectures, case studies, group discussions and interactive activities to engage students in critical thinking and ethical decision-making will be sufficient for upcoming graduates. Practical exercises and ethical review simulations can also be included to provide hands-on experience in applying ethical principles to real-world research scenarios. The content of the course should consist of fundamental topicsincluding;Introduction to Research Ethics, Responsible Conduct of Research, Ethical Guidelines and Regulations, Informed Consent, Ethical Issues in Data Collection and Analysis, Ethical Issues in Publication and Dissemination, Privacy and Confidentiality, Ethical Decision-Making, Emerging Ethical Issues in Research, Risks and Benefits Assessment.

CONCLUSION

The incorporation of ethics will prepare dentists to conduct research with integrity, protect the rights of human subjects, promote evidence-based dentistry and ensure compliance with ethical and regulatory guidelines.

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