Scientific conduct

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Publication Ethics is a standard of conducts that guide the researcher to act responsibly and follow a set of guidelines for conducting and publishing their research.
In layman language, Prime aim of Research is to add knowledge to existing knowledge for the betterment of society. And giving prime importance to secondary purposes is the beginning of unethical practices in research and publications.

We have a moral duty to be honest. This duty is especially important when we share ideas that can inform or persuade others.

Intellectual Honesty combines motivation toward good faith with a primary seeking true beliefs.

These are the conduct that a researchers has to follow:-

INTELLECTUAL HONESTY

Intellectual honesty in the acquisition, analysis, and transmission of ideas. A person is being intellectually honest when hero she,knowing the truth,states that truth.

This includes all forms of scholarship, consequential conversations such as dialogue, debate, negotiations, product and service descriptions, various forms of persuasion, and public communications such as announcements, speeches, lectures, instruction, presentations, publications, declarations, briefings, news releases, policy statements, reports, religious instructions, social media posts, and journalism including not only prose and speech, but graphs, photographs, and other means of expression.

Intellectual honesty is an applied method of problem solving, characterized by an unbiased, honest attitude, which can be demonstrated in a number of different ways including:

- Ensuring support for chosen ideologies does not interfere with the pursuit of truth.

- Relevant facts and information are not purposefully omitted even when such things may contradict one's hypothesis.
- Facts are presented in an unbiased manner, and not twisted to give misleading impressions or to support one view over another.
- References, or earlier work,are acknowledged where possible, and plagiarism is avoided.

Ethics:

- The word ethics is derived from the Greek word ‘ethos’ (meaning a person’s character, nature, or disposition)
- Relating to morals, treating moral questions; morally correct, honorable… Set of principles of morals… Science of morals, moral principles, rules of conduct, whole field of moral science
- distinction between right and wrong or good and evil, in relation to actions, volitions, or character of responsible beings.

Ethical problems in Science research

- The complexity of a single research problem can give rise to multiple questions of proper behavior
- Sensitivity to ethical issues necessary but not sufficient for solving them
- Ethical Problems Are The Results Of Conflicting Values
- Ethical problems can relate to both the subject matter the research and the conduct the research
- An adequate understanding of an ethical problem sometimes requires abroad perspective based the consequences of research
- Ethical problems involve both personal and professional elements
- Ethical Problems Can Pertain To Science And To Research
- Judgments about proper conduct lie on a continuum ranging from the clearly unethical to the clearly ethical

Nature of Moral Judgement

- If the researcher is inviting the subject to enter into a relationship which is honest and open the researcher owes his or her subject to a similar level of honesty and openness

- If the researcher is encouraging honesty and openness of a kind which exposes the subject to risk of hurt or injury then the researcher has some obligation to protect the subject from that hurt or injury.

Nature of Ethical Reactions in Research

- Research subjects should be considered as another granting institution, granting their valuable time in return for generation of valuable scientific knowledge
- The traditional cost-benefit model that under lies ethical decision making in social research should be modified emphasize the outcomes both doing and not doing the research, and also the possibilities of doing the research in another manner
- A more detailed reporting of ethical procedures used should be required and expected in all published social research
- A focus on the ethical acceptability of applied research should become a critical component of a mutually reinforcing applied scientific community
- Evaluations of the ethical acceptability of social research require an awareness of the ethical climate in society and in the scientific community

RESEARCH INTEGRITY

- Research integrity may be defined as active adherence to the ethical principles and professional standards essential for the responsible practice of research
- By active adherence we mean adopting the principles and practices as a personal credo,not simply accepting them as impositions by rule makers.
- By ethical principles we mean honesty, the golden rule, trust worthiness, and high regard for the scientific record
- “For individuals research integrity is an aspect of moral character and experience. It involves above all a commitment to intellectual honesty and personal responsibility for one's actions and to a range of practices that characterizes responsible research conduct.” National Achievement Survey (NAS).

Scientific Integrity andResearch Ethics

- Act only in such a way that would want your actions to become a universal law, applicable to everyone in a similar situation.
- Act in such a way that you always treat humanity (whether oneself or other),as both the means of an action, but also as an end.
- Act as though you were a law-making member (and also the king) of a hypothetical “kingdom of ends",and therefore only in such away that would harmonize with such a kingdom if those laws were binding on all others.

Elements of Professionalism

- Intellectual honesty
- Excellence in thinking and doing
- Collegiality and openness
- Autonomy and responsibility
- Self Regulation

Scientific Misconduct

The violation of the standard codes of scholarly conduct and ethical behavior in professional scientific research ...(research that) deviates from practices commonly accepted in the discipline or in the academic and research communities generally in proposing, performing, reviewing, or reporting research and creative activities

Common types of scientific misconduct

Plagiarism: Plagiarism is the appropriation of another person’s thoughts, ideas, data, figures, research methods, or words without giving appropriate credit, or the overcitation of another person’s published work.

Fabrication: Fabrication is the practice of making up data or results without having performed relevant research.

Falsification: Falsification is the practice of changing data or results intentionally such that misleading conclusion is drawn.

Inappropriate authorship: Authorship is not appropriately assigned based on the author's contributions.

Duplicate submission/multiple submissions: Duplicate submission/multiple submissions refers to the practice of submitting the same manuscript or several manuscripts with minor differences (e.g., differences only in title, keywords, abstract, author order, author affiliations, or a small amount of text) to two or more journals at the same time, or submitting to another journal within an agreed or stipulated period.

Overlapping publication: Overlapping publication refers to the practice of publishing a paper overlaps substantially with one already published.

Salami publication: Salami publication refers to the practice of slicing data from a large study, could have been reported in a single paper, into different pieces and publishing them in two or more articles, all of which cover the same population, methods, and question.

Inappropriate authorship: Authorship is not appropriately assigned based on the author's contributions.

Unethical Practices in Scientific Research

- Intentional negligence in the acknowledgment of previous work
- Deliberate Fabrication Of data we have collected
- Deliberate omission of known data that doesn't agree with the hypothesis
- Passing another researcher's data as one's own
- Publication of results without the consent of all the researchers
- Failure to acknowledge all of the researcher who performed the work
- Conflict of interest
- Repeated publication of too-similar results or reviews breach of confidentiality

Causes of unethical behavior

• Desire to see voluminous Curriculum Vitae.
• Promotions and academic Development.
• Desire of Grant Sanctioning.

• Competition among colleagues.
• To prove professional supremacy.
• To become guide internal/external or external examiners.
• Authorship as gift to seniors or family members etc.
• A person when uses his position of authority in order to be included as an author, regardless of not being thus qualified is referred as pressured authorship is called Pressurized authorship.