

# Editorial

## Research Ethics: Some Basic Principles

It is essentially an attitude of mind that becomes an attitude to work. It is about the way in which research is planned and conducted, the results are recorded and reported, and the fruits of research are disseminated, applied and exploited. This ultimately leads to the responsibility of an individual researcher, research institution and research community for promoting good research practice. Indeed researchers face an array of ethical requirements. The ethical principles involved in research are as follows:

*Beneficence and non-maleficence:* Beneficence is the ethical principle of doing good in widest sense. Researcher should perform his experiments in the interest and well being of others. Non-maleficence deals with doing no harm by minimizing risk of physical and/or mental harm to themselves, human and animal participants, research subjects, stakeholders and environment which may result from their research.

*Autonomy:* In case of biological research, the meaning of autonomy is different as compared to autonomy in medical research. It is capacity to think, decide and take action in concern to particular procedure. Humans are autonomous and can give their autonomy individually during their participation in study but, when it comes to animals then their autonomy is of no importance. So, it is the responsibility of researcher to respect autonomy of laboratory animal.

*Truth telling:* Those who are involved in research should always abide with honesty toward himself, scientific community and toward whole world. Do not fabricate, falsify or misrepresent data. A single lie in research could falsify the whole theory of research done in the past yet has to be in future.

*Confidentiality:* It is the responsibility of researcher to protect his confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets and patient records. In many fields of laboratory research, it is standard practice to record data in ink in an indexed permanently bound laboratory notebook with consecutively numbered pages.

*Respect to intellectual property:* The patents and copyright of researcher should be honored. The unpublished data and methods should not be used by anyone without permission. Give proper acknowledgment or credit for all contributions to research.

*Euthanasia:* Euthanasia is ethically justified, when laboratory animal is at the verge of extreme pain and discomfort. Euthanasia can be practiced nonvoluntary or involuntary concerning laboratory animals. Nonvoluntary: Ending the life of a patient who is not capable of giving permission. Involuntary: Ending life against a patient's will. Researcher should follow proper guidelines in order to practice euthanasia. Investigators who use laboratory animals are obliged to follow humane procedures so as to minimize animal pain, suffering and distress, and to use no more animals than absolutely necessary.

*Exceptions to confidentiality:* There are situations in research strategy, where a researcher has to lose his confidentiality of data to the research community when it matters to human benefits. The collaborative research of multiple nations exchange their research data which leads to the breaching of confidentiality.

*Follow informed-consent rules:* In biological research, we cannot take informed consent from animals. It will be responsibility of researcher to identify, scrutinize and participate suitable laboratory animals in their study without their consent.

*Tap into ethics resources:* One of the best ways researchers can avoid and resolve ethical dilemmas is to know both what their ethical obligations are and what resources are available to them. Moreover, despite tense relationship researchers can have with their institutional review boards (IRBs), these groups can often help researchers think about how to address potential dilemmas before projects begin.

*Justice:* The principle of justice also requires equality in distribution of benefits and burdens among the population group(s) likely to benefit from the research. Any research study should be designed, conducted and reported in such a way that the findings are accurate and not compromised by preconceptions or by any particular political and philosophical stance. Findings and data should not be falsified or suppressed for any reason.

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