

OPINION

BIOETHICS. ITS ROLE IN RESEARCH

Bioethics, that implies from its Greek roots, *bios*, and *ethike* which each respectively means life and ethics, is the study of ethical issues arising in the practice of biological disciplines. Medical and health care ethics are the major components of bioethics. Later it develops widely and extends well beyond health care, to include the ethics of research in life sciences and almost any ethical issues on human life. Human research is an endeavor that exploits some individuals for a greater good, but the exploitation is considered acceptable and even justifiable as long as participation is voluntarily and informed, as is conducted within the well established ethical framework of respect for persons, beneficence and justice. It must be a studious inquiry, and aimed at extending human knowledge, beyond what is already known, especially in this respect on biology or medicine.

All proposals to conduct research involving human subjects must therefore be submitted for review of their scientific benefit and ethical acceptability. In the goal of research, mistakes are sometimes or frequently made, due to the lack of care or deliberate attempts to obtain personal advancement by manipulations. These latter are called research misconducts, some are as follows:

- Fabrication of data: the data are created deliberately so as to be able to propound with greater conviction a particular hypothesis.
- Falsification of data: data are manipulated or falsified to fit in with notional guess as to what they ought to have been.
- Plagiarism means passing off as one's own the work or ideas of others.
- Data selection, management and manipulation means generating masses of data or observations are acquired before the researcher has learned how to do the experiment in the most effective manner.
- Authorship issues relate to intellectual property, the number of names appearing in scientific article, and the policy related to that.
- Review misconduct or theft that focuses on the grant, which is launched for competition among individuals or institutions.
- Monitoring issues focus on mentor-student relationship so as to deprive the student of recognition and to abuse the education process for the mentor / supervisor

Many others are various, but the uppermost 3; fabrication, falsification, plagiarism are considered to be the most serious transgression of the ethics of scientific research or publication. The articles published are called the fraudulent articles.

To conclude it should be remembered that, honesty, trust and personal responsibility are the fundamental basis of the academic society. Academic honesty is a prelude to the personal integrity and professional ethics that will govern one's career. Further, it provides the clearest path to knowledge understanding and truth, which is the highest goal of an academic institution. Airlangga University School of Medicine, therefore, very much expects the honesty from all of its members.

M. Sajid Darmadipura
Department of Neurosurgery
Airlangga University School of Medicine
Dr Soetomo Teaching Hospital