Research Ethics
Part I

Module 2 Topic 1

What is Ethics?

- A code to live by!
- Moral principles that govern a person's behaviour or the conducting of an activity!
- The branch of knowledge that deals with moral principles!
  - Meta-ethics, concerning the theoretical meaning and reference of moral propositions, and how their truth values (if any) can be determined
  - Normative ethics, concerning the practical means of determining a moral course of action
  - Applied ethics, concerning what a person is obligated (or permitted) to do in a specific situation or a particular domain of action

Morals and Ethics

- Morals: A code of behaviour that governs one's life. It is decided and defined by the person, each having a personal code of morals, defining limits and checks.
- Ethics: A code of behaviour defined externally for an individual as a part of a professional group. Applies equally to all people within the group.

- Bioethics
- Business ethics
- Animal ethics
- Political ethics

- Legal ethics
- Military ethics
- Public sector ethics
- Publication ethics

Bioethics

- **Bioethics** is the study of the ethical issues emerging from advances in biology and medicine.
  - The four main moral commitments are respect for **autonomy**, **beneficence**, **nonmaleficence**, and **justice**. Using these four principles and thinking about what the physicians' specific concern is for their scope of practice can help physicians make moral decisions.
- Documents such as the Declaration of Helsinki, ICMR Guidelines 2017, ICH GCP, CIOMS Ethics Guidelines, CDSCO GCP help in upholding the principles of ethics.
- The Ethics Committee review is the internationally recognized mechanism for ensuring that guidelines are followed and principles of ethics upheld.
- Protect the rights and well being of research participants.

Good laws have their origins in bad morals

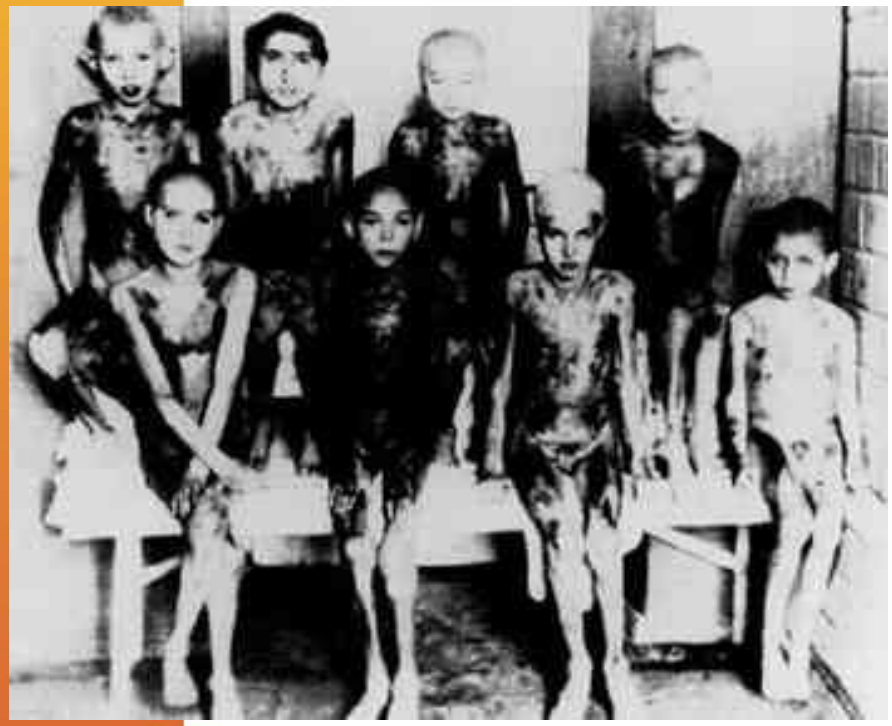
Macrobius Ambrosius Theodosius

(circa 400 AD)

Research on Slaves

Cleopatra(69-30 BC), the last queen of the Ptolemaic dynasty, was an extraordinary woman. She believed that male and female fetuses develop at different rate. She got many of her slave maidens impregnated and then sacrificed them at different stages of pregnancy.
What she found is not recorded.

The Holocaust

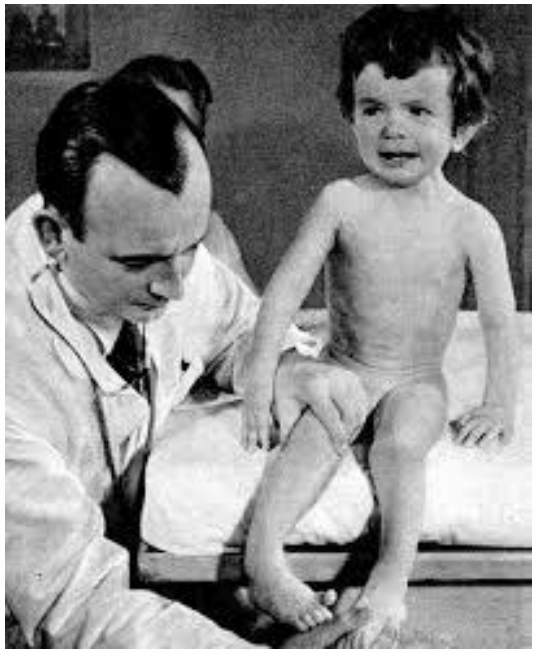


The worst experiments were conducted on children by the Nazis.

Twenty Jewish children were picked up by Nazi scientists, there lymph nodes were surgically removed and they were infected with TB bacilli, in the belief that they had an inherent immunity to TB.

As the enemy armies surrounded the clinic, the children were taken to a school, photographed and hanged.

The slippery slope



Ernst Wentzer, a pediatrician was known for his work on rickets. He was also one of the three pediatricians who ordered the deaths of thousands of children who didn’t meet the Nazi ideal of health.

The Doctors' Trial

Twenty three medical staff were tried at Nuremberg for 'crimes against Humanity'. Eight were sentenced to death, while others were sent to jail for varying terms.
At the end of the trial the medical experts proposed the Nuremberg Code.

Quaker Oats

The Massachusetts School for the Feeble-Minded, housed mentally disabled children along with abandoned ones. Conditions at the school were often brutal; staff deprived boys of meals, forced them to do manual labor and abused them.

MIT conducted a study feeding boys with radioactive iron and calcium. Between 1945 and 1962, 210,000 Americans were exposed to radiation in studies approved by the Atomic Energy Commission.

KLINTEC Academy

Willowbrook

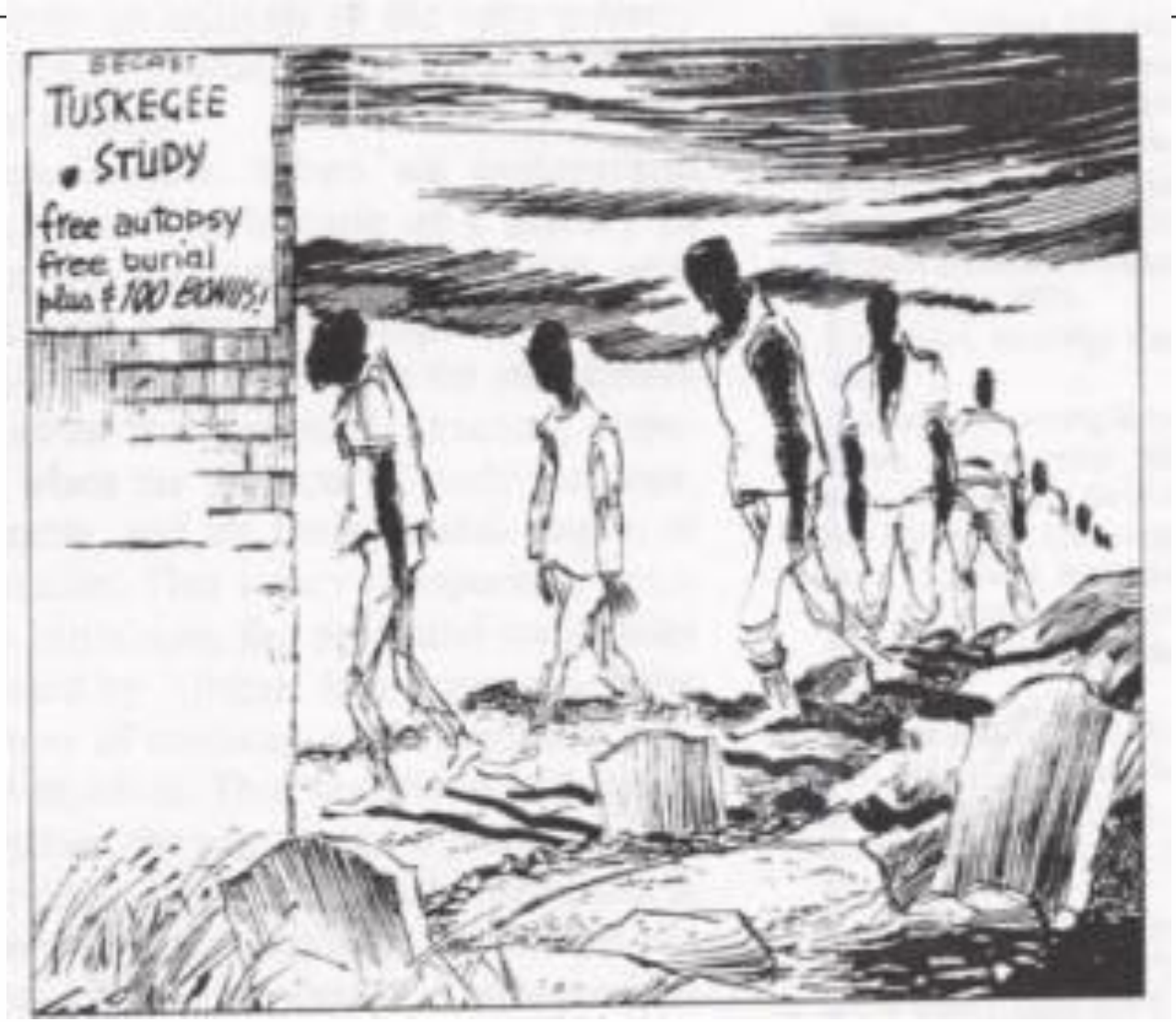
Willowbrook was a state school for mentally retarded. Here these children were experimentally infected with Hepatitis, in order to test the efficacy of γ globulin. No informed consent were taken. These children were incapable of maintaining personal hygiene, and used to get hepatitis, it was thought that there is no harm in infecting them in a controlled way.

Tuskegee **Syphilis Study**

The Syphilis Study at Tuskegee (1932-72) involved 399 men who were infected with syphilis. An additional 201 men who were not infected with the disease served as controls. All of the syphilitic men were in the late stage of the disease when the study began. None were given any treatment.

All the participants were poor, black and many were illiterate, there was no informed consent, no choice to drop out, and none of the protections as we know today. This is labelled as the longest unethical study in History.

Tuskegee Study



Evolution of Ethics

Ethics codes evolved in response to intentional or accidental injury to participants in medical practice research.

Albert Neisser's experiments on Syphilis (1898) - Berlin Code (1900)

Tuberculin tragedy in Lubeck (1929)- Guidelines (1931)

Experiments by Nazis on prisoners (1939-45) – Nuremberg Code (1948)

Willowbrook & Tuskegee Studies (1970's) – Belmont Report (1979)

Basic Philosophy

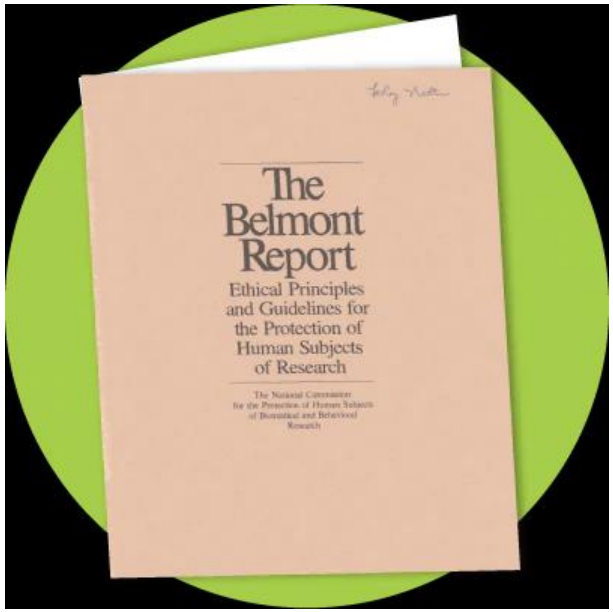
Golden Rule is the principle of treating others as you want to be treated. It may be expressed as a positive or a negative injunction governing conduct.

- **Treat others as you would like others to treat you** (positive or directive form)
- **Do *not* treat others in ways that you would *not* like to be treated** (negative or prohibitive form)
- **What you wish upon others, you wish upon yourself** (empathic or responsive form)

Basic Principles

Respect for Persons
Beneficence
Justice

In ‘Principles of Biomedical Ethics’ Beauchamp and Childress included a fourth principle:
Non Malfeasance



Respect for Persons

Two main ethical convictions

- All individuals should be treated as autonomous agents,
  - Freedom of choice of actions unless they are detrimental to others
  - Provide adequate information to exercise freedom of choice
- Persons with diminished autonomy are entitled to protection
  - not every human being is capable of self-determination
  - extent of protection should depend upon the risk benefit balance

The concept of informed consent and vulnerability springs from this.

Beneficence

Persons are treated in an ethical manner by

- protecting them from harm,
- making efforts to secure their well-being

- Beneficence is served by
- Maximizing benefits to participants
- Minimizing harm to participants

Justice

Justice in this context means

- Non discrimination on the basis of gender, religion, colour caste etc.
- Equal distribution of benefits and harms

- Provision of medial reimbursement and compensation for injuries stems from this principle

Non Malfeasance

‘Primum non nocere’ or ‘First do no harm’ is a basic principle of medicine.

Do not harm the participant

Prevent harm to the participant

Do more good than harm

Declaration of Helsinki

- First adopted at the 18th World Medical Association General Assembly in Helsinki, Finland, 1964.
- Revised a number of times, the recent revision is of 2013, Forta Leza, Brazil
- Incorporates the clauses from Nuremberg Code, Geneva Declaration and Vienna Convention
- India is a signatory to the Declaration and we are obliged to follow its clauses.

ICMR Guidelines

- Policy Statement on Ethical Considerations Involved in Research on Human Subjects' (1980) Chairman Justice H R Khanna.
- 'Ethical Guidelines for Biomedical Research on Human Subjects' (2000) Chairman Justice M N Venkatachalaiah
- "Ethical Guidelines for Biomedical Research on Human Participants" (2006) Chairman Dr. M S Valiathan
- "National Ethical Guidelines for Biomedical and Health Research Involving Human Participants (2017) Chairman Dr. P N Tandon

Chapters in 2017 Guidelines

- Statement of General Principles
- General ethical issues
- Responsible conduct of research
- Ethical Review Procedures
- Informed Consent Process
- Vulnerability
- Clinical trials of drugs and other interventions
- Public health research
- Social and behavioural sciences research for health
- Human genetics testing and research
- Biological materials, biobanking and datasets
- Research during humanitarian emergencies and disasters

General Principles

- Essentiality
- Voluntariness
- Non Exploitation
- Social responsibility
- Privacy and Confidentiality
- Risk minimization
- Professional competence
- Maximization of benefits
- Institutional arrangements
- Transparency and accountability
- Totality of responsibility
- Environmental protection

General Ethical Issues

- Benefit risk assessment
- Informed consent process
- Privacy and confidentiality
- Payment for participation
- Compensation for research related harm
- Ancillary care
- Conflict of Interest
- Community engagement

Application of Ethical Principles

Voluntariness

Subjects (healthy volunteers or patients) cannot be coerced or induced to participate in studies. Their consent must be preceded by detailed explanation of the risks, burdens and benefits if any, of participating. A written consent form , in a language of their choice, should be signed before any study related activity is conducted. In India, certain studies require AV recording of consent process.

The informed consent form and its translations must be approved by the Ethics Committee before use.

Vulnerability

Respect for persons respects autonomy of all individuals, yet recognizes that some people are legally or medically not autonomous. Those below the legal age (18 years) and a variety of people are not able to decide for themselves, whether to participate in research studies or not.

Consent on their behalf is given by legally authorized representatives (LARs), who are family members or care givers who can decide what is best for them.

Vulnerable Population

- Socially, economically or politically disadvantaged and susceptible to exploitation
- Incapable of making a voluntary informed decision for themselves or if their autonomy is compromised temporarily or permanently (e.g., people who are unconscious, differently abled)
- Able to give consent, but their voluntariness or understanding is compromised due to their situational conditions
- Unduly influenced either by the expectation of benefits or fear of retaliation in case of refusal to participate, which may lead them to give consent

Legally Authorized Representative

- Any individual who does not have the autonomy to provide informed consent, may be recruited, if the legally authorized representative is ready to consent on his/her behalf.
- The consenting individual should be recognized as a LAR under the Indian Law.
- If the participant becomes capable of giving consent during the study, a fresh informed consent should be taken.

Impartial Witness

- Under some special circumstances, there may be the need for an impartial witness.
- When the participant is blind or illiterate, the informed consent procedures should be conducted in the presence of a witness.
- The witness certifies that the consent process was compliant with guidelines and regulations, and that the written document was indeed actually explained to the participant.
- With the advent of AV recording the importance of witness is significantly reduced.

Ethics Committee

- Any research study involving human participants must be approved by a recognized and approved ethics committee, at its meeting.
- An ethics committee should review all trial documents and decide to approve, modify or reject a research proposal.
- If the research site does not have an ethics committee, the investigator may seek the approval of a committee within 50 km to approve and provide oversight to the research.

Questions?

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