Research ethics and ethical principles

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Outline of presentation

• What is Research Ethics?
• Why Research Ethics?
  – Malpractices in health research
• Ethical Principles
  – Protection of humans in research (initially)
• Implementation of ethical principles
  – Ethical codes/guidelines
  – Ethics review committees
  – Legal frameworks
  – Etc.
  – Virtuous researchers
• Concluding remarks
What is research ethics?
‘Defining’ Research Ethics

• One person on an island that is not owned by anybody

• Second person emerges

• ‘Limited freedom’

• Normative standards/ethics
‘Defining’ Research Ethics

• Animal/s living on an island

• Normative standards/ethics

• Animals are not moral agents

• Humans are moral agents responsible for
  – welfare of animals
  – the environment
Some fields related to Ethics

• Human rights and civics

• Religion

• Customs and traditions

• Law
Why Research Ethics?
Why bother about Research Ethics?

• Past atrocities, harms and abuses
  – Eg Nazi human abuses, Tuskegee case in USA, etc.
  – Contemporary malpractices in health research

• Global economies have become knowledge-driven hence research is critical
  – Ethics, justice and fair play are likely to be swept under the carpet

• Individuals, communities, nations, environment, animals, etc. may be harmed by research
  – Knowingly or unknowingly
  – Directly or indirectly
Nazi human abuses and atrocities

Jews, gypsies, Poles, Russians, etc. (war prisoners):

• **High-altitude** (low-pressure) experiments: put prisoners in low-pressure tanks, how long could they survive with little oxygen?, autopsies followed

• **Freezing exp.**: force prisoners to remain outdoors, naked, freezing, 9-14 hrs; or put in freezing water 3hrs; try re-warming bodies

• **Malaria exp.**: infect prisoners, give drugs, many died

• **Typhus exp.**. Inject prisoners with antityphus “vaccine”. Then infect with typhus; controls: infect with typhus no treatment;
Nazi human abuses and atrocities

- **Mustard Gas Expt**: inhale mg; try various treatments;
- **Poison expt**: feed patients various poisons, many died; kill survivors for autopsy;
- ‘Creating’ **Siamese twins**: twins sewed together
- ‘Pathology expts’ using **twins**: infected one twin with “germs”. When s/he died, the other twin was killed and their organs were compared
- **Cross transfusions**: To “make boys into girls and girls into boys”
International codes/guidelines

• Nazi trials were done from 1946 to 1947
  – ‘Researchers’ were convicted and sentenced
• Nuremburg Code was developed in 1947
  – Voluntary consent to participate in research
  – Risk-benefit analysis of research (before it is done)
  – Etc
• Other international codes developed
  – Declaration of Helsinki, CIOMS, etc.
• Ethics for studies not involving humans
  – Animal research ethics, Bio-safety, etc.
Ethical Principles

• There are 4 fundamental ethical principles

• Principle of autonomy

• Principle of beneficence

• Principle of non-maleficence

• Principle of justice
Principle of autonomy

• Autonomy: Derived from Greek words “autos” (self) and “nomos” (rule)

• Self-rule or self-determination

• Basis of informed consent

• Pre-conditions: competence (the capacity to be a moral agent) and liberty or freedom to be autonomous
Principles of beneficence and non-maleficence

• Beneficence: doing good and maximising benefits

• Non-maleficence: not doing any harm to others

• Two sides of the same coin: though non-maleficence may be the minimum, it may be inadequate on its own
Principle of justice

• Fairness in selection of participants

• Fairness in sharing of risks of research and benefits of the research
Thank you