Ethical Issues in Research

Dr Sheryl vanderPoel
Family, Women and Children’s Health Cluster
Question:

You were about to write your research proposal, and you knew that you must include ethical considerations

- what was the first ethical component or issue that came to your mind ???
Research ethics workshop topics

- **Core components:**
  - The need for ethical review - “research” defined
  - Informed consent and the informed decision-making process
  - Risk and benefit assessment
  - Standard of care debate

- **Special issues:**
  - Concepts of vulnerability
  - Cultural & ethical relativism
  - Multi-national research and post-trial/ “fair benefits” debates
  - Unique situations in social science research

- **Ethics review committee/ Institutional review board (IRB):**
  - Roles & responsibilities
  - Implementation/ Process of scientific & ethics review of research
  - Challenges
# Ethics workshop format: Collaborative & Interactive

- Plenary presentations
- "Break-out" interactive sessions to review scenarios
- Discussions and role-playing
  - participants, community members, researchers, ethics committee members, monitors, member of ministries/academic institutions, & industry
- A full mock-IRB session
What has driven the field of “research ethics” and the generation of ethical guidelines?
**Origins of Contemporary Research Ethics:**

Ethical guidelines were not proactive but rather **reactive**

as 'recipes' to resolve research situations or outcomes that had caused harm to research participants.
The fields of Ethics -
More often reactionary, than proactive

“It took the cruelty described at Nuremberg to make the world realize it had to do something that would protect human subjects from inhumane research.”

John Bryant (Past President, CIOMS, 2000)

“Nothing moves the field of research ethics forward at a faster rate - than a scandal.”

Robert Levine (Discussions on the Declaration of Helsinki, Brocher, 2013)
How about new innovations?

3 person IVF?

More often than not, scientific discovery and new medical interventions are ahead of ethical debate.
Synthetic biology...

Dual use for synthetic biological organisms
WHO Definitions for “Research”

*Research* is defined by the WHO-ERC as:

- Any social science, biomedical, behavioural, or epidemiological activity that entails systematic collection or analysis of data, with the intent to develop or contribute to generalizable knowledge.
- *Generalizable knowledge consists of theories, principles or relationships, or the accumulation of information on which they are based, that can be corroborated by accepted scientific methods of observation and inference.*

*Research* is defined by the WHO Strategy on Research for Health as:

- The development of knowledge with the aim of understanding health challenges and mounting an improved response to them.
- *This definition, in the research for health strategy, covers a spectrum of research, which spans five generic areas of activity: measuring the problem; understanding its cause(s); elaborating solutions; translating the solutions or evidence into policy, practice and products; and evaluating the effectiveness of solutions*
Research ethics

All research involving human participants must be conducted in a manner that respects the dignity, safety and rights of research participants and that recognizes the responsibilities of researchers.
(WHO Definition)
Ethics versus morality versus human rights
Research Ethics Deliberations, guided by:

- International Ethical Guidelines for Biomedical Research Involving Human Subjects, Geneva, Switzerland: Council for International Organizations of Medical Sciences (CIOMS), 2002 (in revision, 2013...)
- International Ethical Guidelines for Epidemiological Studies, Geneva, Switzerland: Council for International Organizations of Medical Sciences (CIOMS), 2009 (in revision, 2013...)
Clarifying concepts of “ethical” guidance

Confusion and a moral base:

Absolutism:

*Exception-less ethical rules exist* that are valid for all cultures at all times and places.

Universalism:

*Fundamental ethical principles exist that are universally applicable* because ethical principles are general, and require moral interpretation.
Human Rights Conventions:
Equality, Health, Privacy, Non-Discrimination including the Areas of Economic, Social and Cultural Rights

Do we really need to do research on humans?

Do you really need to do the research you have designed?
- or -
how you have designed it?
Harm

- During times of war:
  - Human Experimentation during WWII
    - German-supported research throughout Europe
    - Japanese-supported research in China

A victim of a Nazi medical experiment is immersed in icy water at the Dachau concentration camp. SS doctor Sigmund Rascher oversees the experiment. Germany, 1942
Harm

During times of war:

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Unit 731's human experimentation was carried out in China during the WW2. More than 3,000 Chinese people were tortured and killed by Japanese doctors.

This human experimentation included vivisections for medical training, intentional infection, and limits of tolerance on the human body.
Response

- 1946-1947, Nuremberg "Doctors' Trial"
- 1947, Nuremberg Code (Crafted by Dr. Leo Alexander; initially a 6-point code defining legitimate – within a legal framework - human research)
  - Addressed voluntary consent by informed human subjects
  - Addressed issues of protection and safeguards to prevent harm
  - Assessing risk versus benefit
  - Addressed issues concerning quality of the experimentation with regards to the experimental design
- 1948, UN Universal Declaration of Human Rights
1. The voluntary consent of the human subject is absolutely essential
2. Scientific rigor
3. Good design
4. Avoid unnecessary suffering
5. Death or serious injury should not be an expected outcome
6. Risks weighed against importance of the problem
7. Preparation/facilities to protect subject
8. Scientific qualifications of researcher
9. Subject must be free to withdraw at any time
10. Be able to stop study at any time
Harm

- YET, during post-war history:
  - Human Experimentation continued in the USA:
    - 1932-1972 Tuskegee (Alabama, US Public Health Service)
    - 1963 Jewish Chronic Disease Hospital (Brooklyn, NY, USA)
    - 1967 Willowbrook State School (New York, NY, USA)
Response

1964, World Medical Association: Declaration of Helsinki

- Addressed deficiencies in the Nuremburg Code, specifically with regard to research in legally incompetent, or 'vulnerable' population

- Focused on the physician:
  - "It is the mission of the physician to safeguard the health of the people."
Response – Code of practice & Research

- 1964, World Medical Association: Declaration of Helsinki
- Focused on the physician:
  - "It is the mission of the physician to safeguard the health of the people."
  1. Beneficence - 'do positive good'
  2. Non-Malfeasance - 'do no harm'
  3. Informed Consent
  4. Confidentiality/ Anonymity
1979, Belmont Report
Boundaries between Practice and Research
(all researchers, not only physicians)
- Basic Ethical Principles
  (autonomy, beneficence, justice)
- Applications
  (Informed consent, Assessment of risk and benefit and Subject Selection.)

(The National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, US)
**Complexity in the Guidance of Research Conduct:**

*Deconstructing that complexity* with use of the Belmont Principles

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<tr>
<th>Respect for persons</th>
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<tr>
<td>Consent</td>
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<td>Access to information</td>
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<tr>
<td>Privacy</td>
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<td>Autonomy</td>
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<td>Protection of confidential information</td>
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**Beneficence**

Harms/Risks & Benefits

**Justice**

Fairness, Rights
3 Basic Ethical Principles in Research

- **Respect** for Human Beings/Respect for Autonomy
  1. Individuals should be treated as autonomous agents (voluntary informed consent) – individual vs community
  2. Individuals with diminished autonomy are entitled to protection (minimize risk and avoid harm)

- **Beneficence**
  - Not "kindness" but an "obligation" placed upon not just investigators but stakeholders and society at large, to
    1. Do positive good
    2. Maximize possible benefits and minimize possible harms

- **Justice (Distributive)**
  1. An individual receives benefit from research, not being denied what is entitled and
  2. An individual bears the burden, but not imposed unduly.
Why was Non-Malfeasance - 'do no harm' – not added as the fourth?
Response – New and Revisions

- Council for International Organization and Medical Sciences (CIOMS) formed by WHO and UNESCO.
  
  - 1970s, CIOMS undertook research on bioethics in cooperation with the WHO, resulted in 1982, with the "Proposed Ethical Guidelines"
  
  
  - 1993/2002 CIOMS International Ethical Guidelines for Biomedical Research

- 2013.... CIOMS has initiated the revision and combining of the two sets of Guidelines.
Ethical Dilemma …

For researchers and participants
What do you think? A boundary of practice and research (e.g. laproscopic investigation)

Does anyone have a duty to serve as an experimental participant?

- **Facts:**
  - New doctors require training
  - Doctors in training must treat someone their first time

- **Question:**
  - On what basis would you insist that someone else accept doctors in training so that you may avoid them?
What do you think?
(e.g. microbicide research without use of condoms, risk of HIV transmission; thalidomide research in pregnant women)

Does anyone have a duty to serve as an experimental participant?

- **Facts:**
  - Medical science must advance for humans to benefit
  - Ineffective, unsafe, or inferior treatments need to be identified and eliminated
  - Progress in medicine requires experimentation with appropriate controls

- **Question:**
  - If you are equal with all other humans, who should be sharing the burden of experimentation?
What do you think?
The "non-consenting" participants

- May participants be part of a research study without consent?
  - Emergency medicine research (non-pneumatic anti-shock garment)
  - Research that may effect the health of future generations:
    - Fetus
    - Gamete or germ cell exposure
You are a researcher. You have just orally presented a research proposal to your institutional ethics review board.

Why would the members of your IRB/ERC only request to see
1. A concept note about the project
&
2. The informed consent form of your study?
Ethics Committee recommendations and requirements often take the form of a *prescriptive ticked sheet*:

- Provide a summary of your research
- Please disclose this information in your *informed consent form*:
  - Research description
  - Risks
  - Benefits
  - Alternatives
  - Confidentiality
  - Compensation
  - Contacts
  - Voluntary participation
“Standards and operational guidance for ethics review of health-related research with human participants”
Informed Consent & the Decision-making Process

There is a distinction between:

informed consent (documentation), &
the informed decision-making process

Informed decision-making process includes:

all aspects leading to informed consent, &
to informed dissent
The decision by the participant to be:
- based on competence (ability to understand)
- voluntary (free of coercion, undue influence, intimidation or inducement)
- aware and acknowledge risk and benefit of participation

Information from the investigator to be:
- comprehensive
- comprehensible (simple language)
Informed decision-making:

To protect the research participant from harm

- physical
- psychological
- social (stigmatization, community exclusion)
- legal (fines, incarceration)

.... not to protect the investigator from claims.
Checklist for the consent process:
The CIOMS Guidelines (1/2)

- Inform the participant why they are being approached
- Ensure that consent is voluntary (without coercion)
- Explain freedom to withdraw (participant has a veto)
- Protection for those lacking capacity for self-determination
- Explain the purpose of the research (participants know what they are getting into)
- Describe the trial design in lay terms
- Explain duration of participation required
- Discuss any remuneration
- Discuss mechanisms to inform participants of study results
- Notify participant of confidentiality arrangements and safeguards about access to individual data
- Confirm ethical consent (informed or understood) has been obtained
Checklist for the consent process: The CIOMS Guidelines (2/2)

- Discuss foreseeable risks
- Discuss possible benefits to the individual or community
- Will the intervention be available after study completion?
- What are the alternative treatments /interventions?
- Is there a distinction between the role of the investigator and the patient's physician, care giver or guardian? Is there a power differential to consider?
- Are services provided to the participant during the study?
- Explain what arrangements have been made to deal with research-related injury.
- How will the participant be compensated in the event of research-related injury?
- Are any secondary studies proposed?
If a protocol for an intervention can be considered the current “standard of care” then studying its implementation in a new setting may be considered Quality Improvement (QI) rather than Research:

- Protocol may not (or need not) be submitted to a Research Ethics Committee for review
- Need not be compared with an existing intervention in that hospital or unit or community setting
- Would not require informed consent
Think carefully....

Avoid misleading or deceptive statements within your proposal and informed documentation:

e.g. "There are no risks to this research"

Do not overstate the benefits to participants of the research:

e.g. "This new treatment will improve your condition"

Avoid subtly coercive statements

e.g. "We hope that you will agree to participate and remain in this study in order to help us find a cure for your disease"
Respect for persons
Implications in SRH research

- Information revealed may be extremely disturbing for the participant (e.g. fears, violence, incest, rape)

- Research may include those who have unique vulnerabilities (e.g. children/adolescents, trafficked persons, disabled, persons under pressure/stress)

- Information about sexual matters can be deeply personal and private

- Information received may be deeply distressing for the research worker
Respect for persons: Commercial Sex Workers & the Researchers

- Maintaining confidentiality
- Maintaining respect
  - Participants viewed the researcher as “naïve, straight-laced, judgmental and fundamentally different.”
  - The researcher questioned her own role as “voyeuristic, exploitive, emotional, and vulnerable.”

_Miller J. Researching violence against street prostitutes. Methodological and personal perspectives._
Respect for the person: 
Maintaining Confidentiality: Legal implications

- Sensitive information may be obtained: about collateral illegal activities, drug use
- Will the information gathered harm or place at risk the participants or/and the researchers?
- Statutory duty of the researchers to inform the authorities
- Court order to compel disclosure
Beneficence: Harm and Benefits

- Does the research help the participants?
- Can the research be used against the participants?
- How is the research beneficial?
  - Can the identified gaps in knowledge be addressed by the research?
- New recommendations by review groups to involve representatives from the participant groups to assist in scientific design and protocol development.

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Harm from Stigmatization

Researchers must evaluate whether or not their research could result in such group harms and, if a possibility must minimize this risk.

Researchers must be cognizant of risks of double stigmatizations:

- Association of a husband with sexual violence if wife is interviewed on the subject
- Association of risky behaviour of teens to a particular school or community
- Association of HIV/AIDS with homosexuality
- Association of HIV/AIDS and/or STIs with sex workers
- Association of HIV/AIDS and/or STIs with the infertile

Beneficence: not just to participants but to groups
Justice

- People should be treated fairly.
- Selection of research participants, must be unbiased and fair.
- Examples of injustices:
  - Potentially risky research for undesirable vulnerable groups
  - Potentially beneficial research for favoured groups
The prospect of gaining new scientific knowledge need not & should not be pursued at the expense of human rights.
Addressing multi-culturalism
The debate

- The world contains a vast number of cultures with varying customs and traditions

- Multinational research is a global enterprise
  - Sponsors include industry, industrialized country agencies, international organizations

Can universal ethical principles be applied to these culturally diverse settings?
Cultural Sensitivity

- A widely held view: Researchers and sponsors need to be “culturally sensitive”

- “The general duty of respect implies a duty to be sensitive to other cultures.... The variety of beliefs and practices that exist may challenge the notions of overarching ethical principles.

- This in turn prompts an analysis of the relationship between the requirement of sensitivity to cultural differences and the concept of moral relativism”

Types of ethical relativism

1. Descriptive ethical (cultural) relativism
2. Normative ethical relativism
3. Meta-ethical relativism
4. Epistemological relativism
5. Contextual relativism
6. Risk-benefit relativism
1. Descriptive relativism

- Cultural-ethical relativism
  - Customs, traditions, moral beliefs, acceptable modes of conduct, and moral codes vary greatly throughout the world
  - Cultural norms and traditions are the prime source for the moral views of individuals
  - Each society has its own view of what is morally right and wrong, and these views vary from society to society
    - “What is believed to be right in one society is believed to be wrong in another”
3. Meta-ethical relativism

- Conceptual relativism
  - Moral concepts vary from culture to culture and therefore the moral judgments of one society are meaningless or unintelligible to another. Does a
    - culture lacking the concept of human rights understand the idea of individual freedom as a basic right?
    - culture lacking the concept of gender equality understand the idea of women’s rights?
3. Meta-ethical relativism

- Methodological relativism
  - Different cultures use different methods of reasoning to justify moral judgments. Can a culture that views ancient religious texts as the source of moral judgments understand the use of modern secular reasoning to justify moral judgments?*

* This is not a criticism - just depicting how the basis for reasoning to reach judgments can differ
“Ethical imperialism”

Attempts to impose “Western” ethical principles on “non-Western” cultures constitute ethical imperialism.

QUESTION:
– Should researchers and sponsors attempt to impose the universal principle, “respect for autonomy” on non-Western cultures that do not recognize individual autonomy??
Cultural relativism and research ethics

Can the principles of research ethics be universally applied?

QUESTION:
- Does the principle require that informed consent be obtained from each individual participant, even if a culture does not recognize or respect the autonomy of each individual?
Genuine ethical disagreement remains concerning the question of whether some research that may not be conducted for ethical reasons in industrialized countries may nevertheless be conducted in developing countries.
6. Risk-benefit relativism

- Research not ethically acceptable in one country may be ethically acceptable in another country based on different risk-benefit ratios.
- Examples:
  - Spousal/Authority consent, assent or permissions
  - Vaccine research
  - Breast cancer research
  - Placebo-based research
The Spouse: Addressing risk-benefit during moral analysis

- Some cultures maintain the custom of requiring husbands to sign consent forms for their wives to participate in research
  - Requirement exists as well for medical treatment

- Researchers in these countries typically accept the requirement
  - Sometimes, informed consent forms will have a line for a husband’s signature
“Because of existing cultural, religious, political or legal constraints, it is sometimes impossible to achieve the ethical ideal and exceptions to this general principle may have to be accepted....”
CIOMS Guidelines

– “Only the informed consent of the woman herself is required for her participation. In no case should the permission of a spouse or partner replace the requirement of individual informed consent.

– If women wish to consult with their husbands or partners or seek voluntarily to obtain their permission before deciding to enroll in research, that is not only ethically permissible but in some contexts highly desirable.

– A strict requirement of authorization of spouse or partner violates the substantive principle of respect for persons.”

CIOMS, Guideline 16, Commentary
In many societies, permission must first be obtained from a community leader, tribal chief, or council of elders before researchers may enter and approach individuals.

- This process is mistakenly referred to as “community consent.” This is no different, in principle, from permission gained from a school principal or factory owner to enter the premises in order to conduct research.

- However, this is not “consent to enroll participants,” it is permission to enter the community, school or factory.”
Relativists’ defenses

- Departures from widely accepted ethical standards are justified by the cultural context in the country or community where the research is carried out
  - Cultural relativism
- It would be impossible to conduct research without these deviations from “Western” requirements
  - Pragmatic defense
- Requiring adherence would result in a loss of contributions to medical science and lack of consequent benefits to the population in those countries or communities
  - Appeal to justice
Is the same happening with new guidance challenges and guideline generation?

Is ethics based on trends or based on time-honoured principals?
New Guidance Challenges

- 1997-1998, Research clinical study:
  - Utilizing placebo versus low-dose (1/10 does utilized in developed world) AZT (zidovudine) in pregnant woman to study mother-to-child HIV transmission in Africa and Asia.

- 2006-2009, Kesho Bora study:
  - Use of ARVs in breast-feeding women to address prevention of mother-to-child transmission of HIV

- 2000’s, Violence against women studies
  - Operations research attempting to determine prevalence of violence against women
New guidance challenges and trends?

With change of time, change of ethical considerations:

- Harms or perception of harm can change. Even the way the patient, subject, participant and researcher is addressed within the international guideline documents has changed over time.
- 'Vulnerability' and what constitutes a vulnerable individual is changing.
- Influence of a single disease affects change but with this trend should not be a bias international over-arching ethics-based guidance.
- Compensation and stakeholder participatory practices are changing.
Ethical Debates: Controversial Issues in Social Science Research

- **Issue 1**: The use of ‘mystery clients’ for obtaining information or knowledge due to the element of deception involved.
  - This deception violates the normal ethical rules regarding informed consent.

- **Issue 2**: The assessment of interventions that may be *illegal* within the community.
  - The subsequent risk this poses to the participant, other individuals involved or the community.

- **Issue 3**: The *release of information* by a participant *that reflects illegal behaviour or activity*
  - The *necessity to report* to local legal authorities must be addressed prior to participant participation.
**Is there a place for covert research?**

<table>
<thead>
<tr>
<th>No, not under any circumstances</th>
<th>Yes, if the study has been reviewed and proper approval has been obtained.</th>
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<td>Justifications for covert research studies may include:</td>
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<td>– Research is of compelling importance</td>
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<td>– Safety concerns for participants and researchers have been addressed</td>
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<td>– Benefits for the individual participant</td>
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<td>– Avoiding social desirability bias</td>
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A New Ethical Guidance Challenge - II

- Large, worldwide, multi-centre trials:
  - Single CORE/MASTER protocol,
  - Often generated in (funded by) the developed world,
  - Implemented internationally in developing countries.
New Guidance Challenges - II

- Ethical Challenges?
  - Ethical issues may generate (subtle or not subtle) differences due to diversity of sites (may or may not be depend upon religious, legal, moral or political diversity.)
  - Access to (standard) treatment may or may not affect study design and participatory practice guidelines for stakeholders
  - Altered informed consent or informed consent procedure at each site may or may not be due to language translation issues, or the literacy level of participants.
  - Incentives or coercion may or may not vary in strength and weight dependent on site
  - Monitoring issues for compliance, consistency, and comparison from a distance
Local

versus

international

ethics review committee decisions
A vaccine with serious side effects has the potential for causing harm to healthy children.

The rate, of equally serious harm or even death from a disease that the vaccine is designed to prevent, may differ considerably in the two countries.

Therefore, research on the vaccine may be:

- ethically unacceptable in the country with a low disease prevalence
- but ethically acceptable in the country with high prevalence
Individual versus a community

- Delegated authority versus autonomy;
  Respecting women versus respecting cultures
  - Do communities have rights? Who speaks for a community - May a chief or religious leader consent for a group of people?
  - Husband and wife relationships – Must a husband consent for his wife?
  - Children, adolescents and 'young adults’ – May a school official consent for a whole school? Must a caregiver/parent consent on behalf?
CIOMS International Guidelines for Epidemiological Studies (2009)

- An additional 3 Guidelines all effect ICFs:
  - 22. Disclosure and review of potential conflicts of interest
  - 23. Use of the internet in epidemiological research
  - 24. Use of stored biological samples and related data

- Future ethical review requirements due to repository storage
Substantive vs. procedural requirements

*Substantive* ethical requirements embodied in fundamental principles of bioethics:

- Respect for persons, Beneficence & Justice.

These constitute ethical *standards/principles*, and should be applied universally ...

- Requirement to obtain informed consent individually from each adult participant
- Need to disclose complete information about the research maneuvers to be performed and the expected risks of those interventions
Substantive vs. procedural requirements

**Procedural** ethical requirements

– May vary according to cultural and other differences

  • Requirement for **written documents** in the consent process
  
  • Requirement that written informed consent documents **be signed by participants**
  
  • Member composition of ethical review committees
  
  • Rules of **Procedure** of ethical review committees

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*Standards and Operational Guidance for Ethics Review of Health-Related Research with Human Participants*
Conclusions (1)

- Ethical principles governing research involving human participants are universally applicable.
  - Yet *procedural mechanisms for implementing the principles may differ* from place to place.

- Departing from ethical principles cannot be justified by using custom, culture, and tradition as a reasoning.
  - Culturally sensitive approaches can show “respect for cultures” without violating fundamental ethical principles.
Traditional belief systems can affect participant understanding of “research”

- When research participants are unacquainted with the concepts and methods of clinical/biomedical “research”
  - To preclude the possibility of performing research in these communities could deny members of such societies the eventual benefits of research.
  - Researchers should seek creative ways of presenting information
    - For example, using analogies readily understood by the population

Major danger:
- Individuals may be completely unaware they are participants in research.
- Research that may not benefit them and may even harm them.
Conclusion (2)

- Ethics in research is more than obtaining informed consent from participants.
- Research ethics considerations and dialogue/debate must include basic ethical principles - which should be applied highly contextually.
- Outcome and decision-making on ethical issues will change/evolve - over time and as settings/populations and terminology changes.
Omissions

A few key topics not discussed/mentioned:

- Ethical conduct of researchers, their supporters and sponsors ---
  From project initiation, monitoring, reporting & disseminating results of the research.
- The interplay between ERCs, DSMBs and National Regulatory Bodies/Agencies - When they do or do not agree & the researchers recourse.