

The CIOMS guidelines for epidemiological research : lights and shadows

Rodolfo Saracci

Pisa, Italy



International Ethical Guidelines for Epidemiological Studies

prepared by the

**Council for International Organizations
of Medical Sciences (CIOMS)**

in collaboration with the

World Health Organization

International Ethical Guidelines for Epidemiological Studies

2008 version available at :

www.cioms.ch

(printed version forthcoming)

CONTENTS 1

Acknowledgements

Background

Introduction

International Instruments and Guidelines

General Ethical Principles

CONTENTS 2

- 1.Ethical justification and scientific validity of epidemiological research involving human subjects**
- 2.Ethical review committees**
- 3.Ethical review of externally sponsored research**
- 4.Individual informed consent**
- 5.Obtaining informed consent : essential information for prospective research subjects**
- 6.Obtaining informed consent :obligations of investigators and sponsors**

CONTENTS 3

- 7. Compensation for participation**
- 8. Benefits, harms and and risks of study participation**
- 9. Special limitations on risk when research involves individuals who are not capable of giving informed consent**
- 10. Research in populations and communities with limited resources**
- 11. Choice of controls in clinical trials**
- 12. Equitable distribution of burdens and benefits in the selection of subjects in research**

CONTENTS 4

- 13.**Research involving vulnerable persons
- 14.**Research involving children
- 15.**Research involving individuals who by reason of mental or behavioural disorders are not capable of giving adequately informed consent
- 16.**Women as research participants
- 17.**Pregnant women as research participants
- 18.**Safeguarding confidentiality

CONTENTS 5

- 19.**Right of injured subjects to treatment and compensation
- 20.**Strengthening capacity for ethical and scientific review and biomedical research
- 21.**Ethical obligation of external sponsors to provide health-care services
- 22.**Disclosure and review of potential conflicts of interest
- 23.**Use of the Internet in epidemiological studies
- 24.**Use of stored biological samples and related data

CONTENTS 6

Appendix 1 : Glossary

Appendix 2 : Items to be included in a protocol (or associated document) for epidemiological research involving human subjects

Appendix 3 : The Declaration of Helsinki

Appendix 4 : Members of the Core Group

Appendix 5 : Commenters on the draft guidelines

Structure of the guidelines

- 1. Self-contained set (→booklet)**
- 2. Rationale and process of production explained**
- 3. Ethical principles outlined**
- 4. Twenty-four guidelines, each of one to four paragraphs**
- 5. Each guideline is followed by a commentary expanding on the rationale, particularly as the guideline applies to observational studies, special circumstances of application etc.**

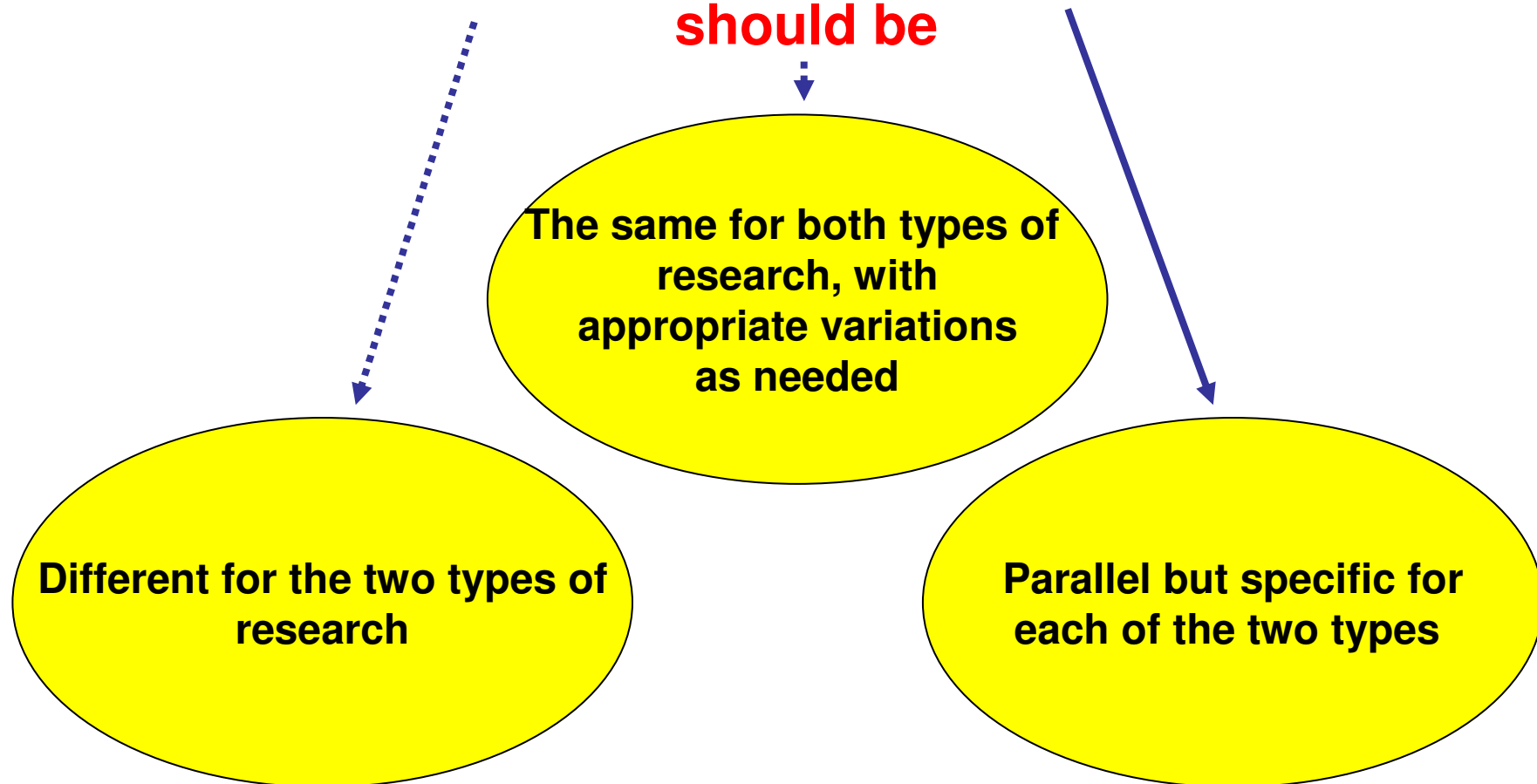
for biomedical research :

CIOMS

**International Ethical Guidelines
for Biomedical Research
involving Human Subjects**

(2002 version, printed version available)

**Ethical principles are (assumed to be)
'universal'- Ethical guidelines for
BIOMEDICAL RESEARCH *and*
EPDEMIOLOGICAL RESEARCH
should be**



- **Researchers have an obligation to those who contributed personal information and donated biological specimens for research purposes to make actual **optimal research use** of these data and specimens for the benefit of people's health**

Lights and Shadows

- **Only international (at world level) guidelines**
Adaptability to all contexts ?
- **They identify ethical issues in observational studies**
These issues may not raise any real problem
- **Provide guide on how to plan and conduct an ethically proper study**
Several recommendations create an unnecessary extra-work to researchers or may even make a study unfeasible
- **Provide guide for proper use of biological samples**
They restrain the use of precious biological samples
- **If followed they prevent unethical and scientifically invalid studies**
They leave too much room for discretionary procedures generating unethical and scientifically invalid studies

Identifying ethical issues

**An ethical problem emerges
when:**

**an action entails a
conflict between two
“good”**

therefore.....

The four “prima facie” principles for ethical analysis

- **1a. Nonmaleficence : do not do harm**
- **1b. Beneficence : do good**
- **2. Autonomy : respect people
freedom**
- **3. Justice: treat everyone equally**

1.Analyze a research protocol to *identify* the ethical problems

2.For this purpose apply *each* of the four ethical principles from the viewpoints of *each* involved party [researcher(s), sponsor, scientific community, society, subjects in the research]

3.Regard for a moment as the primary viewpoint the one of the subjects included in the research

Informed consent

When informed consent is required ?

[informed consent *process*
is not the same as an
informed consent *form* !]

“Informed consent” means :

- **information to enable *free* consent**
- **consent form**
- **consent process**

When is informed consent required ?

- **It is always required !**
- **Exceptions may be considered (and approved by ethics committees) for use of personal data in archives (eg registers) , particularly when consent would be hard or impossible to obtain**

Is this acceptable ?

- **“Someone comes into your house. You are not there . You do not know who he is. He does not know you. He does not touch anything but looks at everything in your house and leaves. You never knew he was there”**

(Capron AM, 1991)

Guideline 4

Individual informed consent

For all epidemiological research involving humans the investigator must obtain the voluntary informed consent of the prospective subject or, in the case of an individual who is not capable of giving informed consent, the permission of a legally authorized representative in accordance with applicable law. Waiver of individual informed consent is to be regarded as exceptional, and must in all cases be approved by an ethical review committee unless otherwise permitted under national legislation that conforms to the ethical principles in these Guidelines.

Biological samples

Ownership or right of access and use ?

- **“At any moment the genes are part of the bodies of particular people who in free society retain rights that are governed by the rules of informed consent “**

(Eckardt RB , 1996)

Records versus stored biological specimens (personally identifiable)

- **Records carrying collected information can generate new information in large but finite amount through *record linkage***
- **Collected biological specimens can generate in principle an indefinite amount of new information through *old and novel analytical determinations***

Guideline 24

Use of stored biological samples and related data(1)

When collecting and storing human biological samples (and related data, such as health or employment records) for future epidemiological research, the investigator must obtain the voluntary informed consent of the individual donor or, in the case of an individual who is not capable of giving informed consent, the permission of a legally authorized representative in accordance with applicable law.

Guideline 24

Use of stored biological samples and related data (2)

The consent should specify: the conditions and duration of storage; who will have access to the samples; the foreseeable uses of the samples, whether limited to an already fully defined study or extending to a number of wholly or partially undefined studies; and the intended goal of such use, whether only for research, basic or applied, or also for commercial purposes. The ethical review committee should satisfy itself that the proposed collection and storage protocol and the consent procedure meet these specifications.

Guideline 24

Use of stored biological samples and related data(3)

The protocol of every study using stored human biological samples (and related data) must be submitted to an ethical review committee, which should satisfy itself that the proposed use of the samples comes within the scope specifically agreed to by the subjects.

For stored samples collected for past research, clinical or other purposes without informed consent to their use for research, the ethical review committee may consider waiving the consent if it proves materially unfeasible to obtain it, provided that it concludes that doing so would not harm the rights or welfare of the persons from whom the samples were collected.

Three sources of stored samples are commonly in use:

- a. repositories of samples collected and stored with informed consent for long-term, epidemiological studies (for example, so-called "population biobanks");**
- b. repositories of samples collected and stored in the context of a specific research without explicit and fully-informed consent (in line with practices prevailing at the time);**
- c. repositories of samples (typically surgically excised tissues, bioptic fragments, and leftover blood collected for diagnostic purposes) collected and stored in the context of routine clinical care or pathological or forensic examination.**

The source of a record or biological samples may be ***(personally) identifiable*** because:

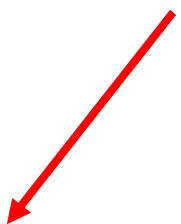
- a. It carries the person's name or a unique identifier such as social security number ***(nominal record or sample)***
- b. It is linked to a source of personal identification (eg medical record or abstract of it, civil register etc.) by a simple or double code ***(linked, coded [double-coded] record or sample)***

In all those cases, fully informed consent is required from the person from whom the sample has been obtained.

b. Repositories of samples collected and stored in the past with no informed consent in the context of research.

When already existing repositories of biological samples collected and stored without an explicit consent procedure offer important and otherwise unobtainable data, an ethical review committee needs to decide whether the use of such samples is justified in the absence of explicit consent. Arguments pertaining to this decision are discussed within the more general framework of waiving of consent in the Commentary on Guideline 4, under the section "*Waiver of consent requirements*".

Lights and Shadows

- **Only international (at world level) guidelines**
Adaptability to all contexts ?
 - **They identify ethical issues in observational studies**
These issues may not raise any real problem
 - **Provide guide on how to plan and conduct an ethically proper study**
Several recommendations create an unnecessary extra-work to researchers or may even make a study unfeasible
 - **Provide guide for proper use of biological samples**
They restrain the use of precious biological samples
 - **If followed they prevent unethical and scientifically invalid studies**
They leave too much room for discretionary procedures generating unethical and scientifically invalid studies
- 

Porto Alegre cathedral



Supplementary slides

**Ethics = moral philosophy=
discourse on moral rules of
personal behaviour**

*it is developed to some extent by
everyone,*

*it is amplified more systematically by
philosophers,*

*and it takes an “institutional” form
within institutions such as formal
religions, committees etc.*

Three different but interrelated bodies of norms :

- *Ethics* : for individuals
- *Law* : for individuals as subjects in society
- *Deontology* : special law for individuals in a profession

Ethical and legal rules are not necessarily the same !

	<u>Legal</u>	<u>Law</u>	<u>Illegal</u>
<u>Ethics</u>	<u>Moral</u> <i>To treat a patient</i>		<i>“Active” euthanasia</i>
	<u>Immoral</u> <i>Overtreatment</i>		<i>Homicide</i>

Ethical and legal rules are not necessarily the same !

	<u>Legal</u>	<u>Law</u>	<u>Illegal</u>
<u>Ethics</u>	<u>Moral</u> <i>To interview people</i>		<i>To get people's cause of death</i>
	<u>Immoral</u> <i>To pay people in study</i>		<i>To take away clinical records</i>

Key general references

- **Beauchamp TL and Childress JF**
Principles of biomedical ethics.
5th ed .Oxford University
Press,2001
- **British Medical Association.**
Medical ethics today : its
practice and
***philosophy.*BMA,1993.**

International reference documents :

- **Helsinki Declaration(2000 revision)**
- **CIOMS International ethical guidelines for biomedical research involving human subjects (2002 revision)**
- **CIOMS International guidelines for ethical review of epidemiological studies (1991 ; *currently under revision*)**

Ethical analysis : principle

**Carry an ethical analysis
of the research protocol
in order to identify the
ethical problems**

Ethical analysis : a scheme

	<i>Beneficence</i>	<i>Autonomy</i>	<i>Justice</i>
➤ <i>Subjects in study</i>	<i>A</i>	<i>B</i>	<i>C</i>
➤ <i>Researcher(s)</i>	<i>D</i>	<i>E</i>	<i>F</i>
• <i>Scientific community</i>	<i>G</i>	<i>H</i>	<i>I</i>
• <i>Society</i>	<i>J</i>	<i>K</i>	<i>L</i>
• <i>Sponsor</i>	<i>M</i>	<i>N</i>	<i>O</i>
• <i>.....</i>	<i>...</i>	<i>...</i>	<i>...</i>