



АКАДЕМИЈА НАУКА И УМЈЕТНОСТИ БОСНЕ И ХЕРЦЕГОВИНЕ  
АКАДЕМИЈА НАУКА И УМЈЕТНОСТИ БОСНЕ И ХЕРЦЕГОВИНЕ  
ACADEMY OF SCIENCES AND ARTS OF BOSNIA AND HERZEGOVINA

# RADOVI

KNJIGA XCIII

**Odjeljenje medicinskih nauka  
Knjiga 33  
Centar za medicinska istraživanja  
Knjiga 3**

*Redakcioni odbor*  
Jela Grujic-Vasić, Ladislav Ožegović,  
Slobodan Loga, Berislav Topić

*Urednik*  
Faruk Konjhodžić  
*dopisni član ANUBiH*

SARAJEVO 2004

# ETHICAL PRINCIPLES FOR MEDICAL RESEARCH INVOLVING HUMAN SUBJECT

Faruk Konjhodžić\* i Alma Prcić\*\*

\*Academy of Sciences and Arts of Bosnia and Herzegovina, Bistrik 7, 71000 Sarajevo, Bosnia and Herzegovina,

\*\*Clinical Center of the University of Sarajevo

## Abstract:

The authors discussed about Declaration of Helsinki for research and pointed out that Ethical Committee should make its statement for those cases when physician decided to investigate anything involving human subjects. Medical research involving human subjects must conform to generally accepted scientific principles, be based on thorough knowledge of the scientific literature, other relevant sources of information and adequate laboratory and animal experimentation. They pointed out that in Sarajevo are functioning three Ethical Committee's. First, and the oldest, in the Clinical Center of University, and two on the Medical Faculty and Faculty for Dentistry, University of Sarajevo. They also pointed out that every cantonal center should have had its Ethical Committee, especially in University centers, and the useful model could be the Ethical Committee of Clinical Center of Sarajevo University.

**Key words:** Medical ethics – medical research involving humans

In June 1964. Eighteenth General Assembly of World Medical Association proposed the Declaration of Helsinki, and it obliged all investigators. We are talking about behavior of all investigators concerning their ethical principles during the investigation. This declaration was amended by 29<sup>th</sup> World Medical Association General Assembly in Tokyo, 1975. , 35<sup>th</sup> meeting the same organization in Venice, 1983. 41<sup>st</sup> in Hong Kong, 1989., 48<sup>th</sup> in Somerset West, South Africa, 1996. , and the 52<sup>nd</sup> in Edinburgh Scotland in October 2000. The latest amend was in Washington, on 52<sup>nd</sup> meeting 2002.

## Introduction

World Medical Association has developed the Declaration of Helsinki as a statement of ethical principles to provide guidance to the physicians and other participants in medical research involving human subjects, because on this field were a lot of misunderstanding and because of situation that some physicians did not pay attention to behavior according the ethical principles. Medical research involving human subjects includes research on identifiable human material or identifiable data. It is the duty of physician, and those who work with him in the same team, to promote and safeguard the health of

the people. The physician's knowledge and conscience should be dedicated to the fulfillment of this duty.

The Declaration of Geneva of the World Medical Association binds the physician with the words: "The health of my patient will be my first consideration", and the International Code of Medical Ethics declares that, "a physician shall act only in patient's interest when providing the medical care which might have the effect of weakening the physical and mental condition of the patient".

But, medical progress is based on research which ultimately must rest in part on experimentation involving the human subjects. In medical research on human subjects, considerations related to the well-being of the human subjects should take precedence over the interests of science and society. The primary purpose of medical research involving the human subjects is to improve prophylactic, diagnostic and therapeutic procedures, and understanding of aetiology and pathogenesis of disease. Even the best proven prophylactic, diagnostic and therapeutic methods must continuously be challenged through research for their effectiveness, efficiency, accessibility and quality.

One must admit that in current medical practice and in medical research, most prophylactic, diagnostic and therapeutic procedures involve risk and burdens. Medical research is subject to ethical standards that promote respect for all human beings and protect their health and rights. Some research populations are vulnerable and need special protection. The particular needs of the economically and medically disadvantaged must be recognised. Special attention is also required:

1. for those who cannot give or refuse consent for themselves,
2. for those who may be subject to giving consent under duress,
3. for those who will not benefit personally from the research,

and those for whom the research is combined with care.

Investigators in medical research should be aware of the ethical, legal and regulatory requirements for research on human subjects in their own countries as well as applicable international requirements. No national, ethical, legal or regulatory requirement should be allowed to reduce or eliminate any of the protections for human subjects set forth in this Declaration of Helsinki.

## Basic principles for all medical research

It is the duty of physician in medical research to protect the life, health, privacy, and dignity of the human subject. It must be the main goal in the medical research. Medical research involving human subjects must conform to generally accepted scientific principles, be based on a thorough knowledge of the scientific literature, other relevant sources of information, on adequate laboratory tests and on the animal experimentation, where it was appropriate. Appropriate caution must be exercised in the conduct of research which may affect the environment, and the welfare of animals used for research must be resepcted.

Design and performance of each experimnetal procedure involving human subjects should be clearly formulated in the experimental prtocol. It should be submitted for consideration, comment, guidance, and where it was appropriate, approval to specially appointed ethical review committee, which must be independent of the investigator, or a sponsor. Because sponsor also might put some undue influence. This independent committee should be in conformity with the laws and regulations of the country in which research experiment is performed. The committee has the right to monitor ongoing trials, and researcher has the obligation to provide monitoring information to the committee, specially any serious adverse events. He should also submit to the committee, for review, information regarding funding, sponsors, institutional affiliations, other potential conflits of interest and incentives for subject in research.

Medical research involving human subjects should be conducted only by scientificaly qualified persons and under the supervision of clinically competent medical person. It must be accordig the principles of Helsinki Declaration. Responsibility for the human subject must always rest with a medically qualified person and never rest on the subject of the research, even though the subject has given consent.

Every medical research project involving human subjects should be preceded by careful assessment of predicable risks and burdens in comparison with foreseeable benefits to the subject or to others. This does not preclude the partipiation of healthy volunteers in medical research. The design of all studies should be publicly available.

Physicaisn should abstain from engaging in research projects involving human subjects unless they are confident that the risks involved have been adequately assesed and ca be satisfactorily managed. Psysicians should cease any investigation

if the risks are found to outweigh the potential benefits or if there is conclusive proof of positive and beneficial results.

Medical research is only justified if there is a reasonable likelihood that the populations in which the research is carried out stand to benefit from the results of the research. The subjects must be volunteers and informed participants in the research project.

The right of research subjects to safeguard their integrity must always be respected. Every precaution should be taken to respect the privacy of the subject, the confidentiality of the patient's information and to minimize impact of the study on subject's physical and mental integrity and on personality of the subject.

In any research on human beings, each potential must be adequately informed of the aims, methods, sources of funding, any possible conflicts of interest, institutional affiliations of the researcher, the anticipated benefits and potential risks of the study and the discomfort it may entail. The subject should be informed of the right to abstain from participation in the study or to withdraw consent to participate at any time without reprisal. After the ensuring that the subject has understood the information, the physician should then obtain the subject's freely-given informed consent, preferably in writing. If the consent cannot be obtained in writing, the non-written consent must be formally documented and witnessed. When obtaining informed consent for the research project, the physician should be particularly cautious if the subject is in a dependent relationship with the physician, or may consent under duress. In that case the informed consent should be obtained by well informed physician who is not engaged in the investigation and who is completely independent of this relationship.

The subject who is legally incompetent, physically or mentally incapable of giving consent, or legally incompetent minor for medical research, the investigator must obtain informed consent from legally authorised representative in accordance with applicable law. These groups should not be included in research unless the research is necessary to promote the health of the population represented and this research cannot instead be performed on legally competent persons.

When a subject deemed legally incompetent, such a minor child, is able to give assent to decisions about participation in research, the investigator must obtain that assent in addition to the consent of the legally authorised representative. Research on individuals from whom it is not possible to obtain consent, including proxy or advance consent, should be done only if the physical or mental condition that prevents obtaining informed consent is a necessary characteristic of the research population. The specific reasons for involving research subjects with a condition

that renders them unable to give informed consent should be stated in the experimental protocol for consideration and approval of the review committee. The protocol should state that consent to remain in the research should be obtained as soon as possible from an individual or a legally authorised person who will replace that subject.

Both authors and publishers have ethical obligations. In publication of the results of research, the investigators are obliged to preserve accuracy of the results. Negative as well as positive results should be published or otherwise publicly available. Sources of funding, institutional affiliations and any possible conflict of interest should be declared in this publication. Reports of experimentation not in accordance with the principles laid down in Helsinki Declaration should not be accepted for publication.

## **Additional principles for medical research combined with medical care**

The physician may combine medical research with medical care of the patient, only to the extent that the research is justified by its potential prophylactic, diagnostic and therapeutic value. When medical research is combined with medical care, additional standards apply to protect the patients who are research subjects. The benefits, risks, burdens and effectiveness of a new method should be tested against those of the best current prophylactic, diagnostic, and therapeutic methods. This does not exclude use of placebo, or no treatment, in studies where no proven prophylactic, diagnostic, and therapeutic method exists. The World Medical Association hereby reaffirms its position that extreme care must be taken in making use of a placebo-controlled trial and that, in general, this methodology should only be used in the absence of existing proven therapy. However, the placebo-controlled trial may be ethically acceptable under following circumstances

1. Where for compelling and scientifically sound methodological reasons its use is necessary to determine efficacy or safety of a prophylactic, diagnostic or therapeutic method, and
2. Where a prophylactic, diagnostic or therapeutic method is being investigated for a minor condition and the patients receiving placebo will not be subject to any additional risk of serious or irreversible harm.

The physicians should fully inform patient which aspects of the care are related to the research. The refusal of the patient to participate in the study must never interfere with the patient-physician relationship.

## Situation in Bosnia

There are three Ethical Committees to day in Bosnia (2003. 05. 03). The oldest one is in Clinical Center of Sarajevo University, and it is formed exactly according to regulations of Helsinki Declaration. There are three fellows representatives of three religious groups, lawyer and social worker, and representative od Ministry of Health, psychiatrist (president), chief of the Center, manager of Clinical Pharmacy and secretary of Medical Department of Academy of Sciences and Art of Bosnia and Hercegovina. All of those are active participants of the decisions and every physician who likes to be researcher including humans must present his project in front of the this Committee, and behaviour according to the rule they are proposed. This Committee lasted for more than ten years and it could be model for formating the Ethical Committees all over the country, because every Cantonal Hospital, specially university centers, must have its own one. The remaining two Committees are one at Medical and one at Department of Dentistry of Sarajevo University

### Apstrakt:

#### ETIČKI PRINCIPI U MEDICINSKIM ISTRAŽIVANJIMA KOJA OBUHVAĆAJU LJUDE

Autori diskutuju o Helsinškoj konvenciji za istraživanje, naglašavajući da je potrebna saglasnost Etičkoga komiteta, za one slučajevе kada se ljekar odluči za istraživanje koje uključuje žive ljudе. Svako istraživanje koje uključuje ljudе mora biti oslonjeno na općenito prihvaćene naučne principe, biti bazirano na reviji medicinske literature drugih relevantnih izvora istraživanja i informiranja, te adekvatnome eksperimentu na životinjama. Naglašavaju da samo u Sarajevu funkcioniraju tri Etička komiteta, jedan, i to najstariji, u Kliničkome centru Univerziteta, a druga dva na Medicinskom i Stomatološkom fakultetu.. Takoder ističu da je potrebno da svaki Kantonalni centar ima svoj Etički komitet, a pogotovo Univerziteski centri. Za to koristan model može biti Etički komitet Kliničkoga centra Univeriteta u Sarajevu.

**Ključne riječi:** medicinska etika – medicinska istraživanja koja obuhvaćaju ljudе

## Literature:

1. Konjhodžić F, i Konjhodžić – Raščić H, Prosudjivanje i istraživanje u kliničkoj medicini, Veselin Maselša; Sarajevo 1987.
2. Huković S, Konjhodžić F, i Mulabegović N, Klinička metodologija istraživanja, Univerzitet u Sarajevu, 1994.
3. Konjhodžić F. Uvod u metodologiju kliničkoga istraživanja, VZŠ, Sarajevo, 2003.