

### **Guidelines for Ethical Conduct of**



### **Research Involving Human Subjects**

### 2008

Written by: Prof. Suad M. Sulaiman B.Sc., M.Sc., Ph.D.

Dr. Mustafa Khidir Elnimeiri MB.BSch., MD. Community Medicine Dr. Samia Yousif Habbani MBBS, MD. Community Medicine

Prof. Awad Mohammed Ahmed MBBS, MD. University of Bahr Elgazal

#### Director:

Dr. Iman Abdalla Musafa MBBS, MD. Community Medicine

### Edited by:

Prof Omer Abdel Aziz Musa MBBS, DTCD, PhD. Faculty of Medicine, NRU, Sudan.

### Revised by the National health Research Ethics Committee members:

Prof. Omer Abdelaziz Musa

Prof. Abdelhameed Ibrahim

Prof. Abdelrahman Kabbashi

Prof. Abd El-Rahman Eltom

Dr. Awad Mohammed Ahmed

Dr. Maawia Mohammed Mukhtar

Sudan Currency Printing Press

### **Contents:** 2. Acknowledgement------G **3.** Abbreviations ------**4. Minister's preface -----**K **5. Preamble -----** M 6. Milestones of preparing the guidelines-----Q 7. Chapter 1: Introduction-----1 1. Introduction ----- 3 1.1 Research involving human subjects----- 4 1.2 What is ethics in research? ------ 5 2. References------ 7 8. Chapter 2: Principles of ethics for research involving Human Subjects-----8 2.1 The major principles ----- 10 2.2 Other principles ------ 12 2.3 References ------ 15 9. Chapter 3: Research Ethics Committees ------16 3.1 National Research Health Ethics Committee (NHREC) ------ 18 3.1.1 Historical background------ 18 3.1.2 Regulation of the National Health Research Ethics Committee (NHREC) ------ 20 3.1.2.1 Authority under which NHREC will be constituted ----- 20 3.1.2.2 Responsibilities of (NHREC) ------ 20 3.1.2.3 Membership of the (HREC) ------ 21 3.1.2.4 Term of the membership ------ 23 3.1.3 Meetings ------ 24 3.1.3.1 Quorum ------ 24 3.1.4 Independent consultants ------ 25 3.1.5 Operational costs ------ 25 3.1.6 Record keeping and Archiving ------ 25 3.1.7 Updating NHREC members ------ 26 3.2 State and Institutional Ethics Committees guidelines ----- 27 3.3 References ------- 28 10. Chapter 4: Ethical clearance procedure -----29 4.1 How to get the ethical clearance? ------ 31

	4.2 Flowchart for getting ethical clearance	32
	4.3 Prepare	33
	4.4 Elements of ethical review	34
	4.5 Application	
	4.6 Review procedures	
	4.7 Expedited review	
	4.8 Decision making	36
	4.9 Communicating the decision	37
	4.10Follow up procedures	38
1	1. Chapter 5: Informed Consent	-39
	5.1 What is 'Informed Consent'?	41
	5.2 Obtaining informed consent	42
	5.3 Process	46
	5.4 Language	46
	5.5 Comprehension	46
	5.6 Documentation of consent	47
	5.7 Waiving of the consent requirement	48
	5.8 Renewing consent	48
	5.9 Cultural considerations	
	5.10 Use of biological materials from subjects in clinical trials	
	5.11 Use of medical records and biological specimens	
	5.12 Secondary use of research records or biological specimens	
	5.13 Obligations of sponsors and investigators	
	5.14 Withholding information and deception	53
	5.15 Intimidation and undue influence	54
	5.16 Equitable distribution of burdens and benefits in the selection	n of
	groups of subjects in research	
	5.17 Exception to the requirement for informed consent in studie	s of
	emergencies	
	5.18 Inducement to participate	57
	5.19 Incompetent persons	57
	5.20 Withdrawal from a study	58
	5.21 Research involving vulnerable persons	
	5.22 Research involving vulnerable groups include	59
	5.22.1 Research involving children	59
	5.22.2 Women as research subjects	59
	5.22.3 Pregnant women as research participants	60
	5.23References	62

12. Annexes63
6.1 National Application Form For Ethical Approval of a Research
Project 67
6.2 National Application Form For Ethical Approval of a Research
Proposal 69
6.2.1 Form A: Part 1: Technical proposal form 69
6.2.2 Form B: Part Two: Ethical Considerations 77
1- Minimization of Harm 77
2- Privacy and Confidentiality 79
6.3 Form C 80
1- Informed Consent 80
2- Declarations 81
موذج إستمارة موافقة الشخص المشارك ) 6.4 The Participant's Acceptance Form
82 أو من ينوب عنه
84 (فورم إقرار موافقة المشارك في البحث موقعاً) 6.5 Model of Informed Consent
6.6 Members of the National Health Research Ethical Committee (NHREC)85

### **Acknowledgement:**

The Directorate of Research – National Ministry of Health (DOR – NMOH) would like to thank Her Excellence the Minister of Health Dr. Tabita Botrous and the under secretary of the NMOH for their concern, encouragement and continuous support for this work. Our gratitude is extended to The WHO Country Office for the technical and financial support provided to produce this document. Special thanks are due to its representative Dr. Mohammed Abdu Arub, for his encouragement and deep concern.

If not for the hard work of Prof. Suad Sulaiman, Dr. Mustafa Khidir El Niemiri, Dr. Samia Habbani and the invaluable advice from Prof. Abd Alhamid Ibrahim, this work would have not been prepared. The DoR is indebted and grateful to them.

Our thanks are due to all the research ethics committee members and special thanks to Prof. Omer AbdAlaziz –Ribat University for his continuous technical and moral support for these guidelines to see light.

Lastly, but not least, our thanks to the former Director of DoR, Dr. Ahmed Eltigani, for his contribution in the initial preparation of this guidelines; and to all the secretarate members.

Dr. Iman Abdalla Mustafa
Director, Directorate of Health Research

### **Abbreviations**

CIOMS : Council for International Organization of Medical Sciences

DOH : Declaration of Helsinki.

DOR : Directorate of Research.

DSMB : Data and Safety Monitoring Board

FMOH : Federal Ministry of Health

HRC : Health Research Council

IEC : Institutional Ethics Committee.

IERC : Institution Ethical Review Committee

IOMS : Islamic Organization of Medical Sciences

JPRM : Joined Programmes Review Mission

NTAC : National Technical and Advisory Committee

NHREC: National Health Research Ethics Committee.

PI : Principal investigator.

SERC : State Ethical Review Committee

SAEs : Serious Adverse Events.

TOR : Terms of Reference

### Minister Preface

Health research ethics are meant to protect human rights, when research involves humans, against immoral violations. The history of health research ethics documented many violations that we are all trying to avoid with the revolutions of human rights and bioethics.

Thanks to the international codes and declarations such as *Nuremberg Code* and *Helsinki Declaration* that established ethical standards and guidelines saving the human dignity and rights in the frame of justice and equity, which paved the road for us to follow.

In the Sudan, in the year 2000, we established a governing body for health research ethics to ensure ethical conduct of research: "The National Committee for Health Research Ethics". The NMOH is embarking on the establishment of Governing bodies at National and State Ministries of Health to decentralize the process of approval of research protocols and build national capacities in this field. With the Comprehensive Peace Agreement, the Interim Constitution of Sudan confirmed the principles of protecting human lives in research under act.

The guidelines for "Ethical Conduct of Research including Human Subjects" were developed to assist and guide all researches and governing bodies at different levels in conducting health research according to the international standards and addressing the profile of Sudan.

Inspiring the spirit of humanity, we launched this booklet to invite every body who believe in faith, science, morals and dignity of human kind. This is for every body, everywhere to work hard in establishing these principles, values and ethical guidelines with love and peace.

Dr. Tabita Botros Shokai Minister of Health, National Ministry of Health Khartoum, April 2008



### **Preamble:**

This document entitled "Guidelines for Ethical Conduct of Research Involving Human Subjects" is the national document for the guidelines that regulate the conduct of research related to health, with special emphasis on those involving human subjects in Sudan. It was developed by the National Health Research Ethics Committee (NHREC) through a long process as a continuation of important historical efforts by the pioneers of health research in Sudan, which had started as early as 1913.

It is composed of five main chapters followed by the annexes. The introduction goes through the main concepts of research, types of research and research ethics.

The second chapter explains the principles of ethics for research involving human subjects. This includes detailed explanation of all the three basic ethical principles, namely respect for persons, beneficence and justice in any research involving human subjects. It also enlists about other 20 principles that regulate and guide the research conduction.

The third chapter is about the National Research Ethics Committee. This includes a thorough explanation of the structure and functioning technical procedures followed within the National Research Ethics Committee. It includes the authority under which NHREC was constituted, its Membership, meetings, and quorum. It also elaborates on the independent consultants, operational cost, the record keeping and archiving together with updating of NHREC members.

In this chapter the guidelines and procedures for the State and Institutional Ethics Committees, were also explained.

Chapter four is the core of the guidelines for the researcher, as it explains all the steps and procedures for obtaining the ethical clearance in a simplified flowchart and detailed steps of what to prepare, ethical elements review, how to apply, review procedures and decision making.

The fifth chapter is about the Informed Consent, its definition, importance, and components. It explains the information that the research subject should know and understand before being involved in the study. The chapter explains the procedure and process by which the informed consent should be obtained from the subjects included in the research. Other principles about the informed consent were included and explained in this chapter. This includes the language, comprehension, documentation of consent, waiver of the consent requirement, renewing consent and other cultural considerations.

It also goes through the regulations of the use of biological materials from subjects in clinical trials, the use of medical records and biological specimens. It explains some of the basic principles about the secondary use of research records or biological specimens together with some obligations to be followed by both sponsors and investigators. It covers the issues related to the possible influence on the research subject like withholding information and deception, intimidation and undue influence. It also aims at assuring the equitable distribution of burdens and benefits in the selection of groups of subjects in research.

The regulation by which an exception to the requirement for informed consent in studies of emergencies in which the researcher anticipates that many subjects will be unable to give consent is also included in this chapter. Special interest is given to the inducement of research subjects to participate and the consent taken from incompetent persons or vulnerable persons. It also emphasizes the right of withdrawal from a study.

The annexes include the, the National Application Form for ethical committee (A & B), and the Informed Consent form guidelines (form c), and the list of the National Research Ethic Committee members.

### Milestones of preparing the guidelines:

- In 2002, The Ministerial Decision No. 11 / 2002 was issued for the formation of Health Research Council (HRC).
- The first meeting of Health Research Council was held in March 2003 with the recommendations of formation of the National Rechearch Ethics Review Committee (NHREC).
- In 2005, a meeting was organized for the NHREC in the Federal Ministry of Health. The members of the committee reached to a common consensus that research ethics guidelines and research ethics directory should be developed, approved and the endorsed.
- The NHREC nominated two subcommittees: One for the purpose of writing the research ethics guidelines for investigators (researchers) to guide them to the principles of ethics in proposing and conducting research on human subjects, and the second for writing ethical research directives to regulate the ethics committee tasks of the proposal reviewing process.
- The sub committees undertook a series of consultative meetings in which the different chapters were agreed upon, and the initial document was agreed up on for submission.
- In 2006, 6<sup>th</sup> and 13<sup>th</sup> of June, two meetings of the NHREC were held in the FMOH. During these meetings thorough and detailed discussion was undertaken to review the guidelines, initial document, and amendments were taken into consideration.

- Two members of the committee were assigned to prepare National Ethics Format and Checklist for ethical review of the research proposals.
- The secretariat of the NHREC reviewed the outcome of the above activities and prepared the final draft of these guidelines. The draft guidelines were later reviewed and edited by a member of the ethics committee.
- The final edited draft was submitted to the NHREC. The latter recommended a national workshop to approve and endorse the guidelines.

# Chapter 1

## Introduction



### 1. Introduction

The term "research" refers to a class of activity designed to develop or contribute to general knowledge. General 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.(1)

In the present context, "research" includes both medical and behavioural studies pertaining to human health. Usually "research" is modified by the adjective "biomedical" to indicate its relation to health. In the field of biomedical research a fundamental distinction must be recognized between medical research, in which the aim is essentially diagnostic or therapeutic for a patient, and medical research the essential objective of which is purely scientific and without implying direct diagnostic or therapeutic value to the person subjected to the research (2).

Progress in medical care and disease prevention depends upon an understanding of physiological and pathological processes or epidemiological findings, and requires in some cases research involving human subjects. The collection, analysis and interpretation of information obtained from research involving human beings contribute significantly to the improvement of human health.

Research involving human participant is defined by WHO as " any social science, biomedical, behavioural or epidemiological act that entails systematic collection or analysis of data with the intent to generate new knowledge, in which human being are involved".

### 1.1 Research involving human subjects includes:

- Studies of physiological, biochemical or pathological processes or of the response to a specific intervention-whether physical, chemical or psychological- in healthy subjects or patients.
- Controlled trials of diagnostic, preventive or therapeutic measures in larger groups of persons, designed to demonstrate a specific generalizable response to these measures against a background of individual biological variation.
- Studies designed to determine the consequences for individuals and communities of specific preventive or therapeutic measures.
- Studies concerning human health-related behaviour in a variety of circumstances and environments (1).

The research may be concerned with the social environment, manipulating environmental factors in a way that could affect incidentally-exposed individuals. It is defined in broad terms in order to embrace field studies of pathogenic organisms and toxic chemicals under investigation for health-related purposes.

Biomedical research involving human subjects is to be distinguished from the practice of medicine, public health and other forms of health care, which is designed to contribute directly to the health of individuals or communities. Prospective subjects may find it confusing when research and practice are to be conducted simultaneously, as when research is designed to obtain new information about the efficacy of a drug or other therapeutic, diagnostic or preventive modality.

#### 1.2 What is ethics in research?

"Ethics is the study of morality – careful and systematic reflection on analysis of moral decisions and behaviour" (2). Ethics and ethical principles extend to all spheres of human activity (3).

The Declaration of Helsinki issued by the World Medical Association in 1964, is the fundamental document in the field of ethics in biomedical research and has influenced the formulation of international, regional and national legislation and codes of conduct. The declaration, amended several times, most recently in 2002, is a comprehensive international statement of the ethics of research involving human subjects. It sets out ethical guidelines for physicians engaged in both clinical and non-clinical biomedical research(4).

Research involving human subjects should be carried out only by, or strictly supervised by, suitably qualified and experienced investigators and in accordance with a protocol that clearly states: the aim of the research; the reasons for proposing involvement of human subjects; the nature and degree of any known risks to the subjects; the sources from which it is proposed to recruit subjects; and the means proposed for ensuring that subjects' consent will be adequately informed and voluntary. The protocol should be scientifically and ethically appraised by one or more suitably constituted review bodies, independent of the investigators.

The mere formulation of ethical guidelines for biomedical research involving human subjects will hardly resolve all the moral doubts that can arise in association with much research, but the guidelines can at least draw the attention of sponsors, investigators and ethical review committees to the need to consider carefully the ethical implications of research protocols and the conduct of research, and thus conduct of high scientific and ethical standards of biomedical research.

### **References:**

- 1- Council for International Organizations of Medical Sciences (CIOMS): **Ethical Guidelines for Biomedical Research Involving Human Subjects**, World Health Organization, Geneva, Switzerland 2002.
- 2- World Medical Association: **WMA declaration of Helsinki**, Adopted by the 18th World Medical Assembly, Helsinki, Finland, June 1964.
- 3- World Medical Association (2005): **Medical Ethics Manual**, The World Medical Association, B.P. 63, 01212 Ferney-Voltaire Cedex, France.
- 4- National Health and Medical Research Council: National Statement on Ethical Conduct in Research Involving Preamble: 28 June 1999.

# Chapter 2

# Principles of Ethics for Research Involving Human Subjects



### 2.1 The major principles:

All research involving human subjects should be conducted in accordance with three basic ethical principles, namely respect for persons, beneficence and non-malificence and justice. It is generally agreed that these principles, which in the abstract have equal moral force, guide the conscientious preparation of proposals for scientific studies (1,4).

- Respect for persons incorporates at least two fundamental ethical considerations, namely:
  - a. Respect for autonomy which requires that those who are capable of deliberation about their personal choices should be treated with respect for their capacity for self-determination.
- b. Protection of persons with impaired or diminished autonomy, which requires that those who are dependent or vulnerable be afforded full security against harm or abuse.
- Beneficence and non-malificence refers to the ethical obligation to
  maximize benefits and to minimize harms, respectively. This gives
  rise to norms requiring that the risks of research to be reasonable in
  the light of the expected benefits, that the research design to be
  sound, and that the investigators to be competent to conduct the
  research and to safeguard the welfare of the research subjects.
- Justice refers to the ethical obligation to treat each person in accordance with what is morally right and proper; to give each person what is due to him or her. In the ethics of research involving human subjects the principle refers primarily to distributive justice,

which requires equitable distribution of both the burdens and the benefits of participation in research.

Table (1): Ethical Principles of Research

Major Principles	Others
1. Autonomy	Accepted Scientifically
2. Beneficence and	2. Accepted qualified
non-maleficence	researchers
3. Justice	3. Ethics committee review
	4. Accuracy of published
	resultsetc

### 2.2 Other principles: (5-11)

- Biomedical research involving human subjects must conform to generally accepted scientific principles and should be based on adequately performed laboratory and animal experimentation and on a knowledge of the related scientific literature.
- 2. Every proposal for health and medical research on human subjects must be reviewed and approved by an independent nationally-recognised ethics committee before it can proceed.
- 3. The research ethics committee may approve the project as presented, require changes before it can start, or refuse approval altogether.
- 4. The design and performance of each experimental procedure involving human subjects should be clearly formulated in an experimental protocol, which should be transmitted for

- consideration, comment, guidance and approval of the nationally-recognised research ethics committee.
- Biomedical research involving human subjects should be conducted only by scientifically qualified persons and under the supervision of a clinically competent medical person as decided by the relevant committee.
- 6. The 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 his or her consent.
- 7. The right of the research subject to safeguard his / her integrity must always be respected. Every precaution should be taken to respect the privacy of the subject and to minimize the impact of the study on the subject's physical and mental health and integrity and on the personality of the subject.
- 8. Physicians should abstain from engaging in research projects involving human subjects unless they are satisfied that the hazards involved are believed to be predictable. Physicians should cease any investigation if the hazards are found to outweigh the potential benefits.
- 9. In publication of the results of his or her research, the physician is obliged to preserve the accuracy of the results.
- 10. In any research on human beings, each potential subject must be adequately informed of the aims, methods, anticipated benefits and potential hazards of the study and the discomfort it may entail. He or she should be informed that he or she is at liberty to abstain from participation in the study and that he or she is free

- to withdraw her consent to participation at any time. The physician should then obtain the subject's freely given informed consent, preferably in writing.
- 11. In case of legal incompetence, informed consent should be obtained from the legal guardian in accordance with national legislation. Where physical or mental incapacity makes it impossible to obtain informed consent, or when the subject is a minor, permission from the legally responsible person/authority replaces that of the subject in accordance with national legislation.
- 12. In any study, every patient- including those of a control group, if any- should be assured of the best proven diagnostic and therapeutic method. This does not exclude the use of inert placebo in studies where no proven diagnostic or therapeutic method exists.
- 13. The refusal of the patient to participate in a study must never interfere with the physician-patient relationship.
- 14. The physician can combine medical research with professional care, the objective being the acquisition of new knowledge, only to the extent that medical research is justified by its potential diagnostic or therapeutic value for the patient.
- 15. It is necessary for the researcher to demonstrate that the risks to the research subjects are not unreasonable or disproportionate to the expected benefits of the research, which may not even go to the research subjects. A risk is the potential for an adverse outcome (harm) to occur. It has two components: (1) the likelihood of the occurrence of harm (from highly unlikely to

very likely), and (2) the severity of the harm (from trivial to permanent severe disability or death). A highly unlikely risk of a trivial harm would not be problematic for a good research project. At the other end of the spectrum, a likely risk of a serious harm would be unacceptable unless the project provided the only hope of treatment for terminally ill research subjects. In between these two extremes, paragraph 17 of the DOH requires researchers to adequately assess the risks and be sure that they can be managed. If the risk is entirely unknown, then the researcher should not proceed with the project until some reliable data are available, for example, from laboratory studies or experiments on animals.

- 16. Paragraph 11 of the declaration of Helsinki (DoH) requires that medical research involving human subjects must be justifiable on scientific grounds. This requirement is meant to eliminate projects that are unlikely to succeed, for example, because they are methodologically inadequate, or that, even if successful, will likely produce trivial results.
- 17. In the purely scientific application of medical research carried out on a human being, it is the duty of the physician to remain the protector of the life and health well-being of that person on whom biomedical research is being carried out.
- 18. Paragraphs 18 and 19 of the DoH clearly favour the consideration of social value in the evaluation of research projects. The importance of the project's objective, understood

- as both scientific and social importance, should outweigh the risks and burdens to research subjects.
- 19. In research on humans, the interest of science and society should never take precedence over considerations related to the well-being of the subject.

### **References:**

http://www.nhmrc.gov.au/issues/humanlpreamble.htm. Produced by NHMRC

- 1- Council for International Organizations of Medical Sciences (CIOMS): **Ethical Guidelines for Biomedical Research Involving Human Subjects**, World Health Organization, Geneva, Switzerland 2002.
- 2- World Medical Association: **WMA declaration of Helsinki**, Adopted by the 18th World Medical Assembly, Helsinki, Finland, June 1964.
- 3- World Medical Association (2005): **Medical Ethics Manual**, The World Medical Association, B.P. 63, 01212 Ferney-Voltaire Cedex, France.
- 4- National Health and Medical Research Council: National Statement on Ethical Conduct in Research Involving Preamble: 28 June 1999.

Date created by NHMRC. Accessed May 2005.

- 5- Operational Guidelines for Ethics Committees That Review Biomedical Research, WHO 2000.
- 6- International guidelines for Ethical Review of Epidemiological Studies, CIOMS, 1991
- 7- Serour G I, Implementation of ethics Review Committee in WHO Workshop [on Ethical Issues in Research in Reproductive Health], Cairo 2001.

- 8- Langat S K, The role of Ethics Review in Health Research, in The Africa Malaria Vaccine Testing Network Workshop on Ethics in Health Research in Africa, Kisumu, Kenya 2001.
- 9- Botha J, the Role of Ethical Review in Health Research, Workshop on Ethics in Health Research in Africa, Kisumu, Kenya 2001.
- 10- World Association Declaration of Helsinki, Ethical Principle for Medical Research Involving Human Subjects, 2000
- 11- TDR, WHO, Scientific and Ethical Review group Terms of Reference and Procedures, 1999.

# Chapter 3

# **Research Ethics Committee**



#### 3.1 National Research Health Ethics Committee (NRHEC)

#### 3.1.1 Historical background:

There is an information gap regarding research ethics committees in Sudan since last century. However, historically the first committee for ethics was established in 1968 to formulate ethics for the medical professions and the act of the ethics of the medical professions in 1969. In this context, a committee was formed on the ethics of the health research in 1979 under the federal laboratories and health research whose targets included the following:

- Protection of the persons
- Protection of the researchers
- Definition of the research priorities

In 1980, the research ethics committee was established in the Faculty of Medicine, the University of Khartoum where it reviewed 400 researches. In 1998, the Undersecretary of the Federal Ministry of Health issued Decree No. 60/1998 for forming a committee to review health research ethics. As a result, the committee for review of health research ethics was set up by the Decree No. 31 / 1999

In 2002, the Federal Minister of Health issued a Ministerial Decree no 11 / 2002 for the constitution of National Technical (NTC) and National Ethical Committees (NEC). According to this decree a number of tasks were assigned for the NHREC:

1- Formulating guidelines for research ethics.

- 2- Undertaking the ethics approval of the research that takes place at the national level in which it participates or that presented to external bodies.
- 3- Endorsement and delegation of the powers to the state and institutional research ethics committees.
- 4- The research ethics committee should include in its membership lawyers, Islamic and Christian religious leaders and the leaders of civil society and should not be confined only to the doctors and scholars in medical and scientific field.
- \* The FMOH would approach WHO EMRO to allocate some funds in the WHO through JPRM.

# **3.1.2** Regulation of the National Health Research Ethics Committee (NHREC)

## 3.1.2.1 Authority under which the NHREC will be constituted:

The FMOH will approve the authority of the constitution and membership of the NHREC. It will be approved and notified by the Federal Ministry of Health.

## **3.1.2.2** Responsibilities of (NHREC):

The committee shall have the following responsibilities:

- Formulating guidelines for the approval of the research ethically.
- The approval of health research that take place at the national level, or in more than one state from an ethical point of view.
- The ethical approval of the research in which there are external participants or that is presented to external bodies.

- The ethical approval of the experimental research on human.
- Reviewing and approving all types of research proposals involving human participants directing or indirectly, with a view to safe-guard the dignity, rights, safety and well being of all actual and potential research participants and to take care of all the cardinal principles of research ethics i.e. autonomy, beneficence, non maleficience and Justice, in planning, conduct and reporting of the proposed research.
- Look into the aspects of informed consent process, risk-benefit ratio, distribution of burden and benefit and provisions for appropriate compensation, wherever required.
- Review the proposals before start of the study, as well as monitor the
  research throughout the study, until and after completion of the study
  through appropriate well documented procedures for example annual
  reports, final reports and site visits etc. .
- The committee will also examine compliance with all regulatory requirements applicable guideline and laws.

# 3.1.2.3 Membership of the (NHREC):

The NHREC should be multidisciplinary and multisectorial. Independence and competence are the two hall marks for membership.

# The membership of (NHRERC) will include 20-25 members:

- 1. The Chairman of the committee.
- 2. The legal advisor of the FMOH.
- 3. Representative of the Government of Southern Sudan.
- 4. The secretary general of the Health Research Council (Rapporteur).

- 5. Representatives of universities and research institutions.
- 6. Researchers.
- 7. Representative of the Medical Council.
- 8. The representative of the Veterinary Research Council.
- 9. The representative of the National Health Laboratory
- 10. The representative of the Sudanese Medical Specializations Board.
- 11. Representatives of the national civil society organizations
- 12. The Representative of Press and Publications Council.
- 13. Representatives of the Islamic and Christian religious men.
- 14. Community leaders.

#### • Chairperson:

The chairperson of the committee should preferably be from outside the Ministry of Health to maintain the independence of the committee.

#### • Deputy chairman if needed:

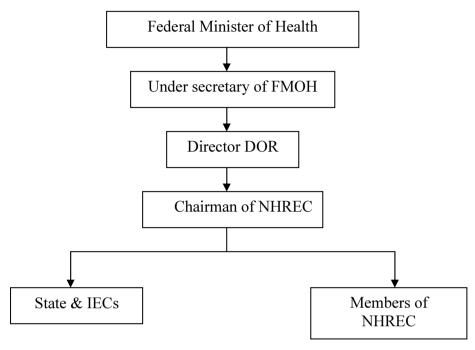
#### • Secretariat:

The Directorate of Research in the Federal Ministry of Health will be the secretariat of the committee. It will take the responsibility of arranging meetings of the committee and implementing its decisions and recommendations. It will coordinate the meetings and keep liaison with states, institutions and international ethics committees. All documents regarding the reviewing process of the proposals received by or sent to the committee are the responsibility of the secretariat.

# 3.1.2.4 Term of the membership:

The members, the chair person and the deputy will be selected by the Minister of Health. The term of the member can end by resignation, death, termination or completing three years.

# Organogram of the ethics committee



## 3.1.3 Meetings:

- 1-The committee will hold a regular meeting every two months, and it may hold an extra meeting if need arises.
- 2-The committee chairman or his deputy chairs the meeting, and in case of the absence of the chairman and his/her deputy the members choose the one who heads the meeting.

# 3.1.3.1 Quorum:

The meeting shall be legal with the attendance of half of the members. In case of the lack of quorum, a following meeting must be determined during one week and it shall be legal by any number of members.

### 3.1.4 Independent consultants:

- a. NHREC may call upon subject experts as independent consultants who may provide special review of selected research protocols, if needed.
- b. These experts may be specialists in ethics or specific diseases, or methodologies, or represent specific communities, or patient groups e. g. cancer patients, HIV/ Aids positive persons or ethnic minority.
- c. They are required to give their specialized views but do not take part in the decision-making process, which will be made by the members of the NHREC.

#### 3.1.5 Operational cost:

The MOH will avail the budget for the operational cost of the committee. The committee will prepare an annual budget covering all the expenses for the meetings, reviewers, consultations.....etc. Fees for application will be decided annually.

# 3.1.6 Record keeping and Archiving:

- 1. Curriculum Vitae (CV) of all members of NHREC.
- 2. Copy of all study protocols with enclosed documents, progress reports, and SAEs.
- 3. Minutes of all meetings duly signed by the Chairperson.
- 4. Copy of all existing relevant national and international guidelines on research ethics and laws along with amendments.
- 5. Copy of all correspondence with members, researchers and other regulatory bodies.
- 6. Final report of the approved projects.

All documents should be archived for a prescribed period.

### 3.1.7. Updating NHREC members

- a. All relevant new guidelines should be brought to the attention of the members
- b. Members should be encouraged to attend national and international training programs in research ethics for maintaining quality in ethical review and be aware of the latest developments in this area.

#### 3.2 States and Institutional Ethics Committees

- I. In 2002, the Federal Minister of Health issued a ministerial decree no. 11/2002 for the constitution of National Technical and Advisory (NTAC) and National Health Research Ethics Committees (NHREC). According to this decree, the NHREC has been assigned to take the task of:
- 1. Endorsement and delegation of its powers to the state and institutional research ethics committees.
- 2. The State Ministries of Health and Head of the research institutions should constitute research ethics committees to approve research proposals conducted by their own researchers and/or that are conducted in the state only.
- 3. State and research institutions ethics committee should not start their functions and tasks of ethical reviewing unless their constitution has been approved and endorsed by the NHREC.

- 4. State and research institutions ethics committees have the authority to issue ethical approval for all health research that takes place inside the state excluding the following researches:
  - i. The experimental research on the human subjects.
  - ii. Researches linked to external bodies (i.e. out side Sudan).
  - iii. Researches that take place in more than one state (Interstate).
- 5. The State and institutional ethics committees work under the supervision of the NHREC.
- 6. The State and institutional ethics committees should present regular biannual reports of their research reviewing activities and the research proposals that have been approved ethically to the NHREC.
- 7. A copy of approved research proposals and copies of the ethical certificates should be enclosed with the report.
- 8. The NHREC discusses the research proposals and the reports of the State and institutions ethics committees in their regular meetings.
- **II.** The state and institution ethics committees should follow the same guidelines, relevant to the research proposal submitted to them.

#### 3.9 References:

1. Council for International Organizations of Medical Sciences International Ethical Guidelines for Biomedical Research Involving Human Subjects

(CIOMS) Geneva 2002.ISBN 92 9036 075 5

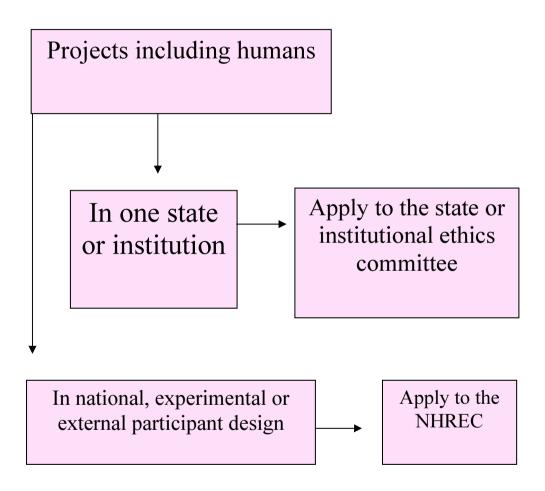
- 2. Council for International Organizations of Medical Sciences International Ethical Guidelines for Biomedical Research Involving Human Subjects (An Islamic Perspective):
- 3. Indian Council of Medical Research. Guidelines for preparing Standard Operating Procedures (SOP) for Institutional Ethics Committee for Human Research. URL: <a href="http://www.icmr.org.ind/">http://www.icmr.org.ind/</a> Produced by ICMR. Date created by ICMR. Accessed May 2006.
- Pakistan Medical Research Council. National Bioethics Committee.
   URL: <a href="http://www.pmrc.org.pk/">http://www.pmrc.org.pk/</a> Produced by PMRC. Date created by ICMR. Accessed
   May 2006.

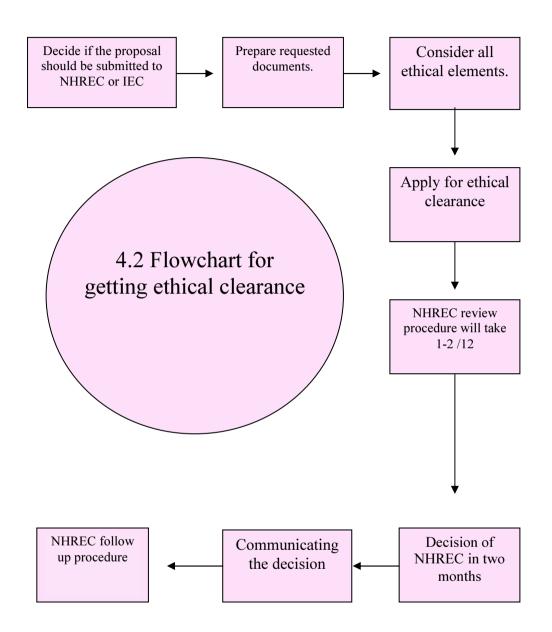
# Chapter 4

# **Ethical Clearance Procedure**



# 4.1How to get the ethical clearance?





# 4.3 Prepare

- 1. Research proposal, copies with name of applicant and institute.
- 2. Curriculum vitae of the investigator.
- 3. Approval of head of department or institution.
- 4. Ethical issues in the study and plan to address them.
- 5. Informed consent
- 6. All relevant pre clinical animal data, and clinical trial data from other centers.
- 7. Any regulatory clearance.
- 8. Source of funding and financial requirements for the project.
- 9. Other financial issues including those related to insurance
- 10. An agreement to report only Serious Adverse Events (SAE) to institutional ethical committee.
- 11. Statement of conflicts or of interest, if any.
- 12. Agreement to comply with the relevant national and applicable international guidelines.
- 13. A statement describing any compensation for study participation (including expenses and access to medical care) to be given to research participants.
- 14. A description of the arrangements for indemnity, if applicable (in study-related injuries).
- . A description of the arrangements for insurance coverage for research participants, if applicable.
- . All significant previous decisions (e.g., those leading to a negative decision or modified protocol) by other ethical committee or regulatory authorities for the proposed study (whether in the same location or elsewhere) and an indication of the modification(s) to the protocol made on that account. The reasons for negative decisions should be provided.
- . Plans for publication of results positive or negative- while maintaining the privacy and confidentiality of the study participants.
  - 18. Any other information relevant to the study.

#### 4.4 Elements of ethical review

- 1. Ethical issues in the design of the study.
- 2. Examination of predictable risks/harms.
- 3. Examination of potential benefits.
- 4. Procedure for selection of subjects in methodology including inclusion/ exclusion, withdrawal criteria and other issues like advertisement details
- 5. Management of research related injuries, adverse events.
- 6. Compensation provisions.
- 7. Justification for placebo in control, if any.
- 8. Availability of products after the study, if applicable.
- 9. Patient information sheet and informed consent form in local language (See chapter 5).
- 10. Protection of privacy and confidentiality.
- 11. Involvement of the community, wherever necessary.
- 12. Plans for data analysis and reporting.
- 13. Adherence to all regulatory requirements and applicable guidelines.
- 14. Competence of investigators, research and supporting staff.
- 15. Facilities and infrastructure of study sites.
- 16. Criteria for withdrawal of patients, suspending or terminating the study.

#### 4.5 Application

- 1. Apply to the NHREC secretariat with all the required documents.
- 2. Reviewable expenses fees should be paid.
- 3. Receivable letter accrediting application will be issued.
- 4. The researcher will be informed about the date of the committee meeting so as to be available for any clarification.

#### 4.6 Review procedures

- 1. The meeting of the NHREC should be held on scheduled intervals as prescribed and additional meetings may be held as and when the proposals are received for review.
- 2. The Directorate of Research will submit the research proposals for technical review one month before submission to the ethics committee.
- 3. Scientific approval will be made according to the technical guidelines.
- 4. Two members from the national ethics committee will be assigned by the raporteur to review proposals in details.
- 5. A report about the ethically reviewed proposals will be presented by the two members to the full members of the committee and will be sent to members at least 2 weeks in advance.

# 4.7 Expedited review

The committee may delegate a mini-committee of five of its specialized members for the tentative approval of the research that requires issuance of the ethics license urgently, provided that review shall take place at the recommendation of the committee reporter and after getting the approval of the committee's chairman or who represents him and the research proposal shall be presented in the nearest meeting of the committee.

# 4.8 Decision making

- 1. Members will discuss the various issues before arriving at a consensus decision.
- 2. A member should withdraw from the meeting during the decision procedure concerning an application where a conflict of interest arises and this should be indicated to the chairperson prior to the review of the application and recorded in the minutes.
- 3. Decisions will be made only in meetings where quorum is complete.
- 4. Only members can make the decision. The expert consultants will only offer their opinions.
- 5. Decision may be to approve, reject or revise the proposals. Specific suggestions for modifications and reasons for rejection should be given.
- 6. In cases of conditional decisions, clear suggestions for revision and the procedure for having the application re-reviewed should be specified.
- 7. Modified proposals may be reviewed by an expedited review committee member.
- 8. Procedures for appeal by the researchers should be clearly defined.

# 4.9 Communicating the decision

- 1. Decision will be communicated by the rapporteur in writing.
- 2. Suggestions for modifications, if any, should be sent by NHREC.
- 3. Reasons for rejection should be informed to the researchers.
- 4. The schedule / plan of ongoing review by the NHREC should be communicated to the Principal Investigator.

## 4.10 Follow up procedures

- 1. Reports should be submitted at prescribed intervals for review.
- 2. Final report should be submitted at the end of the study.
- 3. All SAEs and the interventions undertaken should be reported.
- 4. Protocol deviation, if any, should be informed with adequate justifications.
- 5. Any amendment to the protocol involving new ethical issues should be resubmitted for renewed approval.
- 6. Any new information related to the study should be communicated.
- 7. Premature termination of study should be notified with reasons along with summary of the data obtained so far.
- 8. Change of investigators / sites should be informed.

# Chapter 5

# **Informed Consent**



#### 5.1 What is 'Informed Consent'?

The Council for International Organizations of Medical Sciences (CIOMS) Guidelines has defined informed consent as:

Approval to participate in a study or trial given by a competent individual who:

- Has received the necessary information (verbally and in writing).
- Has adequately understood the information.
- After considering the information, has arrived at a decision without having been subjected to compulsion, undue influence, incentive, or pressure.
- In the case of those who are not capable, has the legal authorization to approve on behalf of the incompetent.

Informed consent is based on the principle that competent individuals are entitled to choose freely whether to participate in research. It protects the individual's freedom of choice and respects the individual's autonomy. As an additional safeguard, it must always be complemented by the approval of an independent review of an ethical research committee.

### 5.2 Obtaining informed consent:

Before requesting an individual's consent to participate in research, the investigator must provide the following information, in language or another form of communication that the individual can understand to the research subject:

- 1. The individual is invited to participate voluntarily in the research, explaining the reasons for considering him/her suitable for the research.
- 2. The individual is free to refuse to participate and will be free to withdraw from the research at any time without penalty or loss of benefits to which he or she would otherwise be entitled.
- 3. The purpose of the research, the procedures to be carried out by the investigator and the subject, and an explanation of how the research differs from routine medical care.
- 4. An explanation of the features of the research design e.g., in controlled trials the method of randomization, double-blinding, and that the subject will not be told of the assigned treatment until the study has been completed and the blind has been broken.
- 5. The expected duration of the individual's participation (including number and duration of visits to the research centre

- and the total time involved) and the possibility of early termination of the trial or of the individual's participation in it.
- 6. Whether money or other forms of material goods will be provided in return for the individual's participation and if so, the kind and amount.
- 7. The subject will be informed of the findings of the research in general, and individual subjects will be informed of any finding that relates to their particular health status.
- 8. The subjects have the right of access to their data on demand, even if these data lack immediate clinical utility (unless the ethical review committee has approved temporary or permanent non-disclosure of data, in which case the subject should be informed of, and given, the reasons for such non-disclosure).
- 9. Any foreseeable risks, pain or discomfort, or inconvenience to the individual (or others) associated with participation in the research, including risks to the health or well-being of a subject's spouse or partner.
- 10. The direct benefits, if any, to the subjects from participating in the research
- 11. The expected benefits of the research to the community or to society at large, or contributions to scientific knowledge.
- 12. Whether, when and how any products or interventions proven by the research to be safe and effective will be made available to

subjects after they have completed their participation in the research, and whether they will be expected to pay for them.

- 13. Any currently available alternative interventions or courses of treatment.
- 14. The provisions that will be made to ensure respect for the privacy of subjects and for the confidentiality of records in which subjects are identified.
- 15. The limits, legal or other, to the investigators' ability to safeguard confidentiality, and the possible consequences of breaches of confidentiality.
- 16. Policy with regard to the use of results of genetic tests and familial genetic information, and the precautions in place to prevent disclosure of the results of a subject's genetic tests to immediate family relatives or to others (e.g., insurance companies or employers) without the consent of the subject.
- 17. The sponsors of the research, the institutional affiliation of the investigators, and the nature and sources of funding for the research.
- 18. The possible research uses, direct or secondary, of the subject's medical records and of biological specimens taken in the course of clinical care.
- 19. Whether it is planned that biological specimens collected in the research will be destroyed at its conclusion, and, if not,

details about their storage (where, how, for how long, and final disposition) and possible future use, and that subjects have the right to decide about such future use, to refuse storage, and to have the material destroyed.

- 20. Whether commercial products may be developed from biological specimens, and whether the participant will receive money or other benefits from the development of such products.
- 21. Whether the investigator is serving only as an investigator or as both investigator and subject's physician.
- 22. The extent of the investigator's responsibility to provide medical services to the participant.
- 23. The treatment will be provided free of charge for specified types of research-related injury or for complications associated with the research, the nature and duration of such care, the name of the organization or individual that will provide the treatment, and whether there is any uncertainty regarding funding of such treatment.
- 24. In what way, and by what organization, the subject or the subject's family or dependants will be compensated for disability or death resulting from such injury (or, when indicated, that there are no plans to provide such compensation).

- 25. Whether or not, in the country in which the prospective subject is invited to participate in research, the right to compensation is legally guaranteed.
- 26. An ethical review committee has approved or cleared the research protocol.

#### 5.3 Process:

Obtaining informed consent is a process that is begun when initial contact is made with a prospective subject and continues throughout the course of the study. By informing the prospective subjects, by repetition and explanation, by answering their questions as they arise, and by ensuring that each individual understands each procedure, investigators have to elicit the informed consent from their subjects. By doing so the investigator manifests respect for their dignity and autonomy.

Each individual must be given as much time as is needed to reach a decision, including time for consultation with family members or others. Adequate time and resources should be set aside for informed-consent procedures.

#### 5.4 Language:

Informing the individual subject must not be simply a ritual recitation of the contents of a written document. Rather, the investigator must convey the information, whether orally or in writing, in language that suits the individual's level of understanding. The investigator must bear in mind that the prospective subject's ability to understand the information necessary to give informed consent depends on that individual's maturity, intelligence, education and belief system. It depends also on the investigator's ability and willingness to communicate with patience and sensitivity.

#### 5.5 Comprehension:

The investigator must then ensure that the prospective subject has adequately understood the information. The investigator should give each one full opportunity to ask questions and should answer them honestly, promptly and completely. In some instances the investigator may administer an oral or a written test or otherwise determine whether the information has been adequately understood.

#### **5.6 Documentation of consent:**

Consent may be indicated in a number of ways. The subject may imply consent by voluntary actions, express consent orally, or sign a consent form. Generally, the subject should sign a consent form, or, in the case of incompetence, a legal guardian or other duly authorized representative should do so.

In some cases, particularly when the information is complicated, it is advisable to give subjects information sheets to retain; these may resemble consent forms in all respects except that subjects are not required to sign them. The ethical review committee should review their wording. When consent has been obtained orally, investigators are responsible for providing documentation or proof of consent.

#### 5.7 Waiving of the consent requirement:

Investigators should never initiate research involving human subjects without obtaining each subject's informed consent, unless they have received explicit approval to do so from an ethical review committee. However, when the research design involves no more than a minimal risk and not greater than that expected with routine medical examination and the requirement of individual informed consent would make the conduct of the research impracticable (for example, where the research involves only data from subjects' records), the ethical review committee may waive some or all of the elements of informed consent. Such waiver may also be approved when the existence of a single consent form would be an unjustified threat to the subject's confidentiality.

#### 5.8 Renewing consent:

When material changes occur in the conditions or the procedures of a study, and periodically in long-term studies, the investigator should once again seek informed consent from the subjects. For example, new information may have become known, either from the study or from other sources, about the risks or benefits of products being tested or about alternatives to them. Subjects should be given such information promptly.

In many clinical trials, results are not disclosed to subjects and investigators until the study is concluded. This is ethically acceptable if an ethical review committee has approved their non-disclosure.

#### 5.9 Cultural considerations:

In some cultures an investigator may enter a community to conduct research or approach prospective subjects for their individual consent only after obtaining permission from a community leader, a council of elders, or another designated authority. Such customs must be respected.

In no case, however, may the permission of a community leader or other authority substitute for individual informed consent. In some populations the use of a number of local languages may complicate the communication of information to potential subjects and the ability of an investigator to ensure that they truly understand it. Many people in all cultures are unfamiliar with, or do not readily understand, scientific concepts such as those of placebo or randomization.

Sponsors and investigators should develop culturally appropriate ways to communicate information that is necessary for adherence to the standard required in the informed consent process. In addition, they should describe and justify in the research protocol the procedure they plan to use in communicating information to subjects.

For collaborative research in developing countries the research project should include the provision of resources to ensure that informed consent can indeed be obtained legitimately within different linguistic and cultural settings.

#### 5.10 Use of biological materials from subjects in clinical trials:

Consent forms for the research protocol should include a separate section for clinical-trial subjects requested to provide their consent for the use of their biological specimens for research. Separate consent may be appropriate in some cases (e.g., if investigators are requesting permission to conduct basic research which is not a necessary part of the clinical trial), but not in others (e.g., the clinical trial requires the use of subjects' biological materials).

### 5.11 Use of medical records and biological specimens:

Medical records and biological specimens taken in the course of clinical care may be used for research without the consent of the patients/subjects. This can only be done if an ethical review committee has determined that:

- \* The research poses minimal risk, that the rights or interests of the patients will not be violated.
- \* Patient privacy and confidentiality or anonymity is assured.

- \* The research is designed to answer an important question and would be impracticable if the requirement for informed consent were to be imposed.
- \* Patients have a right to know that their records or specimens may be used for research. Refusal or reluctance of individuals to agree to participate would not be evidence of impracticability sufficient to warrant waiving informed consent. Records and specimens of individuals who have specifically rejected such uses in the past may be used only in the case of public health emergencies.

## 5.12 Secondary use of research records or biological specimens:

Investigators may want to use records or biological specimens that another investigator has used or collected for use in the same or another institution or another country. This raises the issue of whether the records or specimens contain personal identifiers. If informed consent or permission was required to authorize the original collection or use of such records or specimens for research purposes, secondary uses are generally constrained by the conditions specified in the original consent.

Consequently, it is essential that the original consent process anticipate, to the extent that this is feasible, any foreseeable plans for future use of the records or specimens for research. Thus, in the original process of seeking informed consent a member of the research team should discuss with, and, when indicated, request the permission of, prospective subjects as to:

i. Whether there will or could be any secondary use and, if so, whether such

secondary use will be limited with regard to the type of study that may be performed on such materials;

- ii. The conditions under which investigators will be required to contact the research subjects for additional authorization for secondary use;
- iii. The investigators' plans, if any, to destroy or to strip off personal identifiers from the records or specimens; and
- iv. The rights of subjects to request destruction or removal of individual identification of biological specimens or of records or parts of records that they might consider particularly sensitive, such as photographs, videotapes or audiotapes.

# Sponsors and investigators have a duty to:

- 1) Refrain from unjustified deception, undue influence, or intimidation;
- 2) Seek consent only after ascertaining that the prospective subject has adequate understanding of the relevant facts and of the consequences of participation and has had sufficient opportunity to consider whether to participate.
- 3) As a general rule, obtain from each prospective subject a signed form as evidence of informed consent.
- 4) Investigators should justify any exceptions to this general rule and obtain the approval of the ethical review committee renew the informed consent of each subject if there are significant changes in the conditions or procedures of the research or if new

information becomes available that could affect the willingness of subjects to continue to participate.

5) Renew the informed consent of each subject in long-term studies at pre-determined intervals, even if there are no changes in the design or objectives of the research.

#### 5.14 Withholding information and deception:

Sometimes, to ensure the validity of research, investigators withhold certain information in the consent process. In biomedical research, this typically takes the form of withholding information about the purpose of specific procedures.

For example, subjects in clinical trials are often not told the purpose of tests performed to monitor their compliance with the protocol, since if they knew their compliance was being monitored they might modify their behaviour and hence invalidate results. In most such cases, the prospective subjects are asked to consent to remain uninformed of the purpose of some procedures until the research is completed and after the conclusion of the study they are given the omitted information.

In other cases, because a request for permission to withhold some information would jeopardize the validity of the research, subjects are not told that some information has been withheld until the research has been completed. Any such procedure must receive the explicit approval of the ethical review committee.

Intimidation in any form invalidates informed consent. Prospective subjects who are patients often depend for medical care upon the physician/investigator, who consequently has certain credibility in their eyes, and whose influence over them may be considerable, particularly if the study protocol has a therapeutic component. They may fear, for example, that refusal to participate would damage the therapeutic relationship or result in the withholding of health services. The physician/investigator must assure them that their decision on whether to participate will not affect the therapeutic relationship or other benefits to which they are entitled. In this situation the ethical review committee should consider whether a neutral third party should seek informed consent.

The prospective subject must not be exposed to undue influence. The borderline between justifiable persuasion and undue influence is imprecise, however. The researcher should give justifiable assurances about the benefits, risks or inconveniences of the research, for example, or induce a close relative or a community leader to influence a prospective subject's decision.

## 5.16 Equitable distribution of burdens and benefits in the selection of groups of subjects in research:

- 1- Groups or communities to be subjects of research should be selected so that the burdens and benefits of the research will be equitably distributed. The exclusion of groups or communities that might benefit from study participation must be justified.
- 2- Members of vulnerable groups also have the same entitlement to access to the benefits of investigational interventions that show promise of therapeutic benefit as non vulnerable groups particularly when no superior or equivalent approaches to therapy are available.
- 3- Overuse of certain groups, such as the poor or the administratively available, is unjustified.

# 5.17 Exception to the requirement for informed consent in studies of emergencies in which the researcher anticipates that many subjects will be unable to consent:

Research protocols are sometimes designed to address conditions occurring suddenly and rendering the patients/subjects incapable of giving informed consent. Examples are head trauma, cardiopulmonary arrest and stroke. The investigation cannot be done with patients who can give informed consent in time and there may not be time to locate a person having the authority to give permission.

In such circumstances it is often necessary to precede with the research interventions very soon after the onset of the condition in order to evaluate an investigational treatment or develop the desired knowledge. Consent should be taken from the guardian if available or from an authorized body in the health facility. As this class of emergency exception can be anticipated, the researcher must secure the review and approval of an ethical review committee before initiating the study. If possible, an attempt should be made to identify a population that is likely to develop the condition to be studied. This can be done readily, for example, if the condition is one that recurs periodically in individuals; examples include grand mal seizures and alcohol binges. In such cases, prospective subjects should be contacted while fully capable of informed consent, and invited to consent to their involvement as research subjects during future periods of incapacitation. If they are patients of an independent physician who is also the physician-researcher, the physician should likewise seek their consent while they are fully capable of informed consent.

In all cases in which approved research has begun without prior consent of patients/subjects incapable of giving informed consent because of suddenly occurring conditions, they should be given all relevant information as soon as they are in a state to receive it, and their consent to continued participation should be obtained as soon as is reasonably possible.

#### **5.18 Inducement to participate:**

Subjects may be reimbursed for lost earnings, travel costs and other expenses incurred in taking part in a study; and may receive free medical services. Subjects, particularly those who receive no direct benefit from

research, may be paid or otherwise compensated for inconvenience and time spent. The payments should not be so large, however, or the medical services so extensive as to induce prospective subjects to consent to participate in the research against their better judgment ("undue inducement"). An ethical review committee must have approved all payments, reimbursement and medical services provided to research subjects.

#### 5.19 Incompetent persons

Incompetent persons may be vulnerable to exploitation for financial gain by guardians. A guardian asked to give permission on behalf of an incompetent person should be offered no recompense other than a refund of travel and related expenses.

#### 5.20 Withdrawal from a study:

A subject who withdraws from research for reasons related to the study, e.g. side-effects of a study drug, or who is withdrawn on health grounds, should be paid or recompensed as if full participation had taken place. A subject who withdraws for any other reason should be paid in proportion to the amount of participation. An investigator who must remove a subject from the study for wilful non-compliance is entitled to withhold part or all of the payment.

#### 5.21 Research involving vulnerable persons

Special justification is required for inviting vulnerable individuals to serve as research subjects and, if they are selected, the means of protecting their rights and welfare must be strictly applied.

Individuals conventionally considered vulnerable are those with limited capacity or freedom to consent or to decline to consent. They include children, and persons who because of mental or behavioural disorders are incapable of giving informed consent.

Ethical justification of their involvement usually requires the investigators to satisfy the ethical review committees that:

- a. The research could not be carried out equally well with less vulnerable subjects.
- b. The research is intended to obtain knowledge that will lead to improved diagnosis, prevention or treatment of diseases or other health problems characteristic.
- c. Research subjects and other members of the vulnerable class from which subjects are recruited will ordinarily be assured reasonable access to any diagnostic, preventive or therapeutic products that will become available as a consequence of the research;
- d. The risks attached to interventions or procedures will not exceed those associated with routine medical or psychological examination of such persons unless an ethical review committee authorizes a slight increase over this level of risk.

e. When the prospective subjects are either incompetent or otherwise substantially unable to give informed consent, their agreement will be supplemented by the permission of their legal guardians or other appropriate representatives.

### **5.22 Research involving vulnerable groups includes:**

#### **5.22.1** Research involving children:

Before undertaking research involving children, the investigator must ensure that:

- \* The research might not equally well be carried out with adults;
- \* The purpose of the research is to obtain knowledge relevant to the health needs of children;
- \* A parent or legal representative of each child has given permission;
- \* The agreement (assent) of each child has been obtained to the extent of the child's capabilities;
- \* A child's refusal to participate or continue in the research will be respected.

#### 5.22.2 Women as research subjects:

Investigators, sponsors or ethical review committees should not exclude women of reproductive age from biomedical research. The potential for becoming pregnant during a study should not be used as a reason for precluding or limiting participation. However, a thorough discussion of risks to the pregnant woman and to her foetus is a prerequisite for the woman's ability to make a rational decision to enroll in a clinical study.

In this discussion, if participation in the research might be hazardous to a foetus or a woman if she becomes pregnant, the sponsors/ investigators should guarantee the prospective subject a pregnancy test and access to effective contraceptive methods before the research commences. Where such access is not possible, for legal or religious reasons, investigators should not recruit for such possibly hazardous research women who might become pregnant.

#### 5.22.3 Pregnant women as research participants:

Pregnant women should be eligible for participation in biomedical research. Investigators and ethical review committees should ensure that prospective subjects who are pregnant are adequately informed about the risks and benefits to themselves, their pregnancies, the foetus and their subsequent offspring, and their fertility.

Research in this population should be performed only if it is relevant to the particular health needs of a pregnant woman or her foetus, or to the health needs of pregnant women in general, and, when appropriate, if it is supported by reliable evidence from animal experiments, particularly as to risks of teratogenicity and mutagenicity.

#### 5.23 References:

- 1. TDR/PRD/ETHICS/2000."Operational Guidelines for Ethics
  Committees That Review Biomedical Research"
- Council for International Organizations of Medical Sciences (CIOMS) International Ethical Guidelines for Biomedical Research Involving Human Subjects. CIOMS, Geneva 2002. ISBN 92 9036 075 5

## Annexes



The Republic of Sudan
Federal Ministry of Health
Health Research Council
National Health Research Ethics Committee

## NATIONAL APPLICATION FORM FOR ETHICAL APPROVAL OF A RESEARCH PROJECT

The application technical and ethical guidelines format are to be read before completing this form to ensure that the questions are answered appropriately.

You may find it helpful to read both national technical and ethical guidelines and then fill the format. You can add extra pages.

Before requesting an individual's consent to participate in research, the investigator must read chapter three in the Guidelines for Ethical Conduct of Research Involving Human Subjects.

The Arabic version of the **informed consent** is the form to be used to take the consent from the **Sudanese** research **participants**, so you should fill it in details and in a language or another form of communication that the individual can understand the research subject.

Ministry of Health Health Research Council 2007

Do not include this page with your application form

#### Form A

بسم الله الرحمن الرحيم

**Federal Ministry of Health Health Research Council Health Research Ethics Committee** 

#### NATIONAL APPLICATION FORM FOR ETHICAL APPROVAL OF A RESEARCH PROPOSAL

For office use of	nly
-------------------	-----

	For office use only
	Proposal No.:
	Date Received:
Please read the technical and ethical guideli	nes thoroughly before
filling the form	<u>_</u>
Part 1: Technical proposal form	
1. Principal investigator (PI) / Applicant	
• Name:	
T	

• Name:		
• Institute:		
<ul> <li>Current position</li> </ul>		
• Address / e-mail:		
Office Tel.	Mobile Tel.	
Signature		

#### 2. Co-investigator (1)

• Name:	
• Institute:	
<ul><li>Current position:</li></ul>	

• Address / e-ma	ail:		
• Office Tel.	Mobile Tel.		
• Signature:		<u></u>	
2. Co-investigator	· (2)		
• Name:			
• Institute:			
Current position	on:		
• Address / e-ma			
• Office Tel.		Mobile Tel.	
• Signature :		•	<u>.</u>
2. Co-investigator	: (3)		
• Name:			
• Institute:			
Current pos			
Address / e	-mail:		
• Office Tel.		Mobile Tel.	
• Signature:			
3. Title of Propos		estigators use separate paper	
4. Purpose (tick w	here appropriat	te)	
• For a grant	l		
• For a postg	raduate degree		
• Other, spec	ify		

<b>5. Introduction/ Background</b> (Including rationale, problem statement and hypothesis)
hypothesis)
<b>▼</b> You can use extra paper.
6. Objectives
• General objective:
• General objective:
• General objective:

8. Me	thodology
•	Study design:
•	Study area:
•	Study population: (demographic profile, sampling frame, inclusion and exclusion criteria)
	Sampling: (sample size, calculation, selection, stratificationetc,)

• Data collection technique (interviews, observation, review of secondary
data, focus group discussionetc)
<ul> <li>Data collection tools(including questionnaire, details of laboratory</li> </ul>
tests, detailed sample taking procedures, drug dosage, clinical case
sheet, check listetc.)
,
0 Data analysis
9. Data analysis

9. Work plan:
Place (include institutional technical facilities available)
• Time (include when study to commence, duration, if in stages the time
schedule for each part)
senedule for each party
• Collaborating individuals / institutions:

<b>10. Budget:</b> :( Personnel/ consumable items/ transportation/ field expensesetc.)

#### 11. References:

#### 12. Annexes

#### Form B:

#### **Part Two: Ethical Considerations**

- 1. What is an estimate of total time involved for participants in the study?
- 2. Who will carry out the research procedures?
- 3. What other research studies is the principal investigator currently involved with?
- 4. Where will the research procedures take place?
- 5. Does the project Involve collection or use of human tissue?
- 6. If yes: will this material be used in further studies?
- 8. Is it intended to inform the participant's doctor of individual results of the investigations, and their participation, if the participant consents?
- 9. If **no**, outline the reasons
- 10. Does the researcher, the host department, the host institution, have any financial interest in the outcome of this research? If "yes", please give details.

#### 1- Minimization of Harm

- 11. How do the research procedures differ from standard treatment procedures?
- 12. What are the benefits to research participants taking part?
- 13. What are the physical or psychological risks, or side effects to participants or third parties? Describe what action will be taken to minimize any such risks or side effects.

- 14. What facilities/procedures and personnel are there for dealing with emergencies?
- 15. What arrangements will be made for monitoring and detecting adverse outcomes?
- 16. Is the trial being reviewed by a data safety monitoring board (DSMB)?
- 17. If yes, who will fund of the DSMB?
- 18. What are the criteria for terminating the study?
- 19. Will any potential toxins, mutagens or teratogens be used?
- 20. If yes, specify and outline the justification for their use
- 21. Will any radiation or radioactive substances be used?
- 22. Has the National Committee for atomic energy completed risk assessment?
- 23. If **yes**, please enclose a copy of the risk assessment, and the contact name and phone number
- 24. If **no**, please explain why
- 25. Will any drugs be administered for the purposes of this study?
- 26. If yes:
  - a. is approval of the concerned authorities required?
  - b. trade name of drug
  - c. Chemical name of drug
  - d. Pharmacological class:
  - e. Pharmacological class, e.g., long half life, receptor selectivity.
  - f. Recommended dose range

- g. Form of administration in the study
- h. Known or possible interactions with non-trial drugs the participants may be taking
- i. Side effects and adverse reactions
- 27. Does the study involve the use of healthcare resources?
- 28. If yes, please specify:
- 29. What effect will this use of resources have on waiting list times for patients i.e. for diagnostic tests or for standard treatments?

#### 2- Privacy and Confidentiality

- 30. How will participants be recruited? (e.g. advertisements, notices)
- 31. Where will potential participants be approached? (e.g. outpatient clinic) If appropriate describe by type (eg students)
- 32. Who will make the initial approach to potential participants?
- 33. How will data including audio and video tapes be handled and stored to safeguard confidentiality (both during and after completion of the research project)?
- 34. What will be done with the raw data when the study is finished?
- 35. How long will the data from the study be kept and who will be responsible for its safe keeping?
- 36. Who will have access to the raw data and/or clinical records during, or after, the study?
- 37. Describe any arrangements to make results available to participants, including whether they will be offered their audio tapes or videos.

#### Form C:

#### 1- Informed Consent

Consent should be obtained in writing, unless there are good reasons to the contrary. If consent is not to be obtained in writing the justification should be given and the circumstances under which consent is obtained should be recorded. Attach a copy of the information sheet and consent form.

- 38. By whom, and how, will the project be explained to potential participants?
- 39. When and where will the explanation be given?
- 40. Will a competent interpreter be available, if required?
- 41. How much time will be allowed for the potential participant to decide about taking part?
- 42. In what form (written or oral) will consent be obtained? If oral consent only, state reasons
- 43. Are all participants able to consent themselves?
- 44. If no, explain why, and who will consent for them?
- 45. Is there any special relationship between the participants and the researchers? E.g. doctor/patient, student/teacher
- 46. Will there be any financial cost to the participant, e.g. travel costs? If so, will such cost be reimbursed?
- 47. Will any payments be made to participants or will they gain materially in other ways from participating in this project?
- 48. If **yes**, please supply details

#### 2- Declarations

#### 1. Declaration by Principal Investigator

The information supplied in this application is, to the best of my knowledge and belief, accurate. I have considered the ethical issues involved in this research and believe that I have adequately addressed them in this application. I understand that if the protocol for this research changes in any way I must inform the ethics committee.

application. I understand that if the proto way I must inform the ethics committee.	ocol for this research changes in any
Name of Principal INVESTIGA	ATOR:
SIGNATURE OF PRINCIPAL INVEST	IGATOR:
DATE	
2. Declaration by Head of Depar Investigator is located or appropriate	-
I have read the application and it is appropriate department I give my consent for the applic ethics committee.	
Name and Designation:	
SIGNATURE:	Institution:
DATE:	

#### بسم الله الرحمن الرحيم نموذج إستمارة موافقة الشخص المشارك في البحث أو من ينوب عنه

أنا الباحث (تعرفه باسمك كاملاً ثم أذكر الجهة أو المؤسسة التي تتبع لها والتي تقوم بالبحث), نقوم ببحث أو دراسة عن (ثم تقوم بشرح عنوان البحث وأغراضه بالتفصيل).

لقد تم إختيارك لتشارك في هذا البحث أنت (أو طفلك) ومعك عدد آخر من المشاركين (ثم تشرح له بالتفصيل لماذا أختير هو ومن معه من المشاركين).

نتوقع بمشاركتك أنت والمشاركين الأخرين أن نتحصل على نتائج تفيد (أشرح له الفوائد المتوقعة من البحث على كل من (المشارك نفسه أم المجتمع أم مقدمي الخدمات ......الخ).

خلال هذه الدراسة سأقوم (أشرح له بالتفصيل الإجراء الذي تنوي القيام به تجاه المشارك: أخذ معلومات, أخذ عينة من سوائل الجسم مثل (دم أو بول .....إلخ أو نسيج (مثال :عظم, أو إعطاء عقار أو لقاح أو إجراء تدخلي مثل إجراء عمليات جراحية أو تجربة جهاز طبي أو فحص معملي حديث....إلخ).

الإجراء الذي سأقوم به تجاهك به بعض من المخاطر أو الأعراض الجانبية (ثم تقوم بشرحها له إن وجدت أو يتوقع حدوثها). أو تؤكد له خلو البحث من أية مخاطر على المشارك أو من ينوب عنه. في حال ظهور أي من المضاعفات أو أعراض جانبية سوف نقوم بتقديم الرعاية الصحية لك في (تشرح له الجهة التي سيتلقى فيها الخدمة) بالعلاج المناسب.

ونحن إذ نأمل في مشاركتك معنا في هذا البحث , نؤكد لك على سرية المعلومات و الوثائق الخاصة بك , و أنه لن يطلع عليها إلا الباحث المعنى و لجنة أخلاقيات البحوث الصحية القومية.

( يمكن صياغتها بطرق أخرى مثلا : سنملأ إستمارة توضح معلومات شخصية عنك , و هذه المعلومات ستحفظ بطريقة مشفرة وسرية - أو سنستخدم رقم ولن يظهر إسمك في أي إستمارة – و سوف نخبرك بنتيجة الفحوصات ( في حالة عمل فحوصات معملية) عن طريق طبيبك المعالج , لن نجمع منك أي عينات أخرى , أما العينات التي يتم جمعها سوف تستعمل لغرض هذه الدراسة فقط ). و نود أن نشير كذلك إلى أن المشاركة في البحث طوعية وأن رفضك للمشاركة في البحث لا تفقدك الحق في أي فوائد من البحث ( يمكنك ذكر هذه الفوائد – مثلاً تشخيص و علاج المرض , تحصين , و غيرها ) , مع التأكيد على أنه لن يتم منحك أي قيمة نقدية مقابل المشاركة في هذا البحث ( إلا أنه

كما نؤكد لك إمكانية الإنسحاب من البحث في أي وقت تشاء , و دون إبداء توضيح لأسباب الإنسحاب , ويتم ذلك بالتوقيع على طلب الإنسحاب , و لن يؤثر ذلك أيضاً على حقك في الإستفادة من البحث .

سنقدم لك الرعاية الصحية في حالة حدوث مضاعفات من إجراء هذا البحث.

إذا كان لديك أي سؤال أو إستفسار يخص البحث, المشاركين معك في البحث, أو حقوقك كمشارك أثناء تنفيذ البحث يمكنك الإتصال على (ثم تمده باسم وعنوان الشخص أو الجهة التي سيتصل عليها المشارك):

و في حالة حدوث أي مضاعفات من أثناء تنفيذ البحث يمكنك الإتصال على (ثم تمده باسم وعنوان الشخص أو الجهة التي سيتلقى فيها المشارك الرعاية الصحية)

### فورم إقرار موافقة المشارك في البحث موقعاً

إفرار المشارك : لقد إطلعت على المعلومات الحالية والتي تم شرحها لي وأتيح لى طرح الأسئلة عنها كيفما شئت , و
قد تلقيت الإجابات الوافية عن كل الأسئلة, و أنا أقر بالموافقة (أو أقر عن إبني) على المشارك
طواعية في هذه الدراسة و أعلم بحقى في التوقف عن المشاركة في أي وقت دون أن يؤثر ذلك علم
حقوقى في ( مثلاً: تلقى العناية الطبية اللازمة في أي وقت لاحقاً ).
رمز المشارك
إسم المشارك:
توقيع المشارك
رمز من ينوب عن المشارك( في حال الطفل أو المعاق ذهنياًإلخ)
. توقيع من ينوب عن المشارك شرعا
عنوان من ينوب عن المشارك:
في حال عدم قدرة المشارك على قراءة الإقرار ويحتاج إلى من يشرح أو يترجم له:
إسم الشارح ( اامترجم)
عنوان الشارح أو ( المترجم):
توقيع الشارح أو ( المترجم):

## Members of the National Health Research Ethical Committee (NHREC)

- 1. Prof. Mohamed Ahmed Elsheikh, University of Khartoum/ Faculty of Medicine
- 2. Prof. Suad M. Sulaiman, Nile Collage
- 3. Prof. Omer Abdelaziz Musa, National Ribat University/Faculty of Medicine
- 4. Prof. Mohamed Siddig Ali ,University of Khartoum/Faculty of Medicine
- 5. Prof. Osman Khalafalla, University of Gezira/Faculty of Medicine
- 6. Prof. Abdalhamid Ibrahim, General Directorate of Pharmacy
- 7. Prof. Faisal Awad Ahmed, Veterinary Research Center
- 8. Prof. Ahmed Mohammed Elhassan, Institute of Endemic Diseases
- 9. Prof. Hashim Elgaz, Council of Journalism and Publishing
- 10. Prof. Abdelrahman Eltom, Sudan Medical Council
- 11. Mr. Hamad Abdelatti, SCOVA
- 12. Prof. Zein Alabdin Karar, University of Khartoum /Faculty of Medicine
- 13. Prof. Mamoun Humida/ University of Medical Sciences and Technology
- 14. Prof. Assim Farouq, Omderman Islamic University/Faculty of Pharmacy
- 15. Prof. Abdelrahman Kabashi, Ahfad University for Women/ School of Medicine
- 16. Prof. Ahmed Hassan Fahal, University of Khartoum/Faculty of Medicine
- 17. Prof. Awad Mohamed Ahmed/ University of Bahr Elghazal/ Faculty of Medicine
- 18. Associate Prof. Mustafa Khidir El Niemiri/ International Africa University/ Faculty of Medicine
- 19. Dr. Maawia Mohammed Mukhtar, Institute of Endemic Diseases
- 20. Dr. Amnah Elsadeeg Badry, Ahfad University for Women
- 21. Dr. Abdelgalil Elnazeer Elkaroory, Eliman Research Center
- 22. Dr. Zidan Abdou Zidan, Sudan Medical Specialization Board
- 23. Dr. Mohammed Abdelsalam, University of Juba/Faculty of Medicine
- 24. Dr. Samia Yousif Habbani, community Physician, Ministry of Social Affairs

- 25. Mrs. Afaf Bukhary, Council of Journalism and Publishing
- 26. The Representative of Pharmacy and Poisons Union Board
- 27. Dr. Elnajeeb Suliman, National Health Laboratory/FMOH
- 28. Mrs. Iman Bashir, Legal consultant/FMOH
- 29. Mr. Hamza Tolah, Health Professions Union/FMOH
- 30. Dr. Mustafa Salih Mustafa, Directorate General of Health Planning and Development/FMOH
- 31. Dr. Iman Abdallah Mustafa, Directorate of Health Research/FMOH