

ETHICS OF BIOMEDICAL RESEARCH: ISLAMIC PERSPECTIVES

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“THE VALUE OF RESEARCH DEPEND AS MUCH
ON ITS ETHICAL VERACITY AS ON THE
NOVELTY OF ITS DISCOVERIES”

WILLMAN,2011,P: 267

IDEA



PUBLICATION



"The best of people are those that bring most benefit to the rest of mankind."

Prophet Mohammad, PBUH.

WE WANT TO:

- APPRECIATE OF THE IMPORTANCE OF ETHICS IN RESEARCH
- UNDERSTAND THE PRINCIPLES OF RESEARCH ETHICS
- APPRECIATE THE ETHICAL REQUIREMENTS OF RESEARCH

CONTENT

- RESEARCH .. AND... PRACTICE..A DISTINCTION
- RESEARCH AND ..ETHICS

- SOURCES OF RESEARCH ETHICS
 - ISLAMIC SOURCES/ PRICIPLES
 - OTHER SOURCES
- ETHICAL REQUIREMENTS OF RESEARCH

- ETHICS RELATED TO THE RESEARCHER
- CONCLUSIONS

WHAT IS RESEARCH?

CAREFUL STUDY OF A GIVEN SUBJECT

A PROCESS TO DISCOVER NEW KNOWLEDGE

RESEARCH AND MEDICAL PRACTICE

- Research:

- A class of activities designed to develop or contribute to **generalizable knowledge**
- A careful and detailed study into a specific problem, concern, or issue using the scientific method

- Practice:

- A class of activities designed **solely to enhance the wellbeing** of individual patient. Diagnosis, preventive treatment or therapy.

CLASSES OF RESEARCH

RESEARCH

EXPERIMENTAL

NON-
EXPERIMENTAL



RESEARCH

QUANTITATIVE

QUALITATIVE



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graph TD; RESEARCH[RESEARCH] --- BASIC[BASIC]; RESEARCH --- APPLIED[APPLIED];
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RESEARCH

BASIC

APPLIED

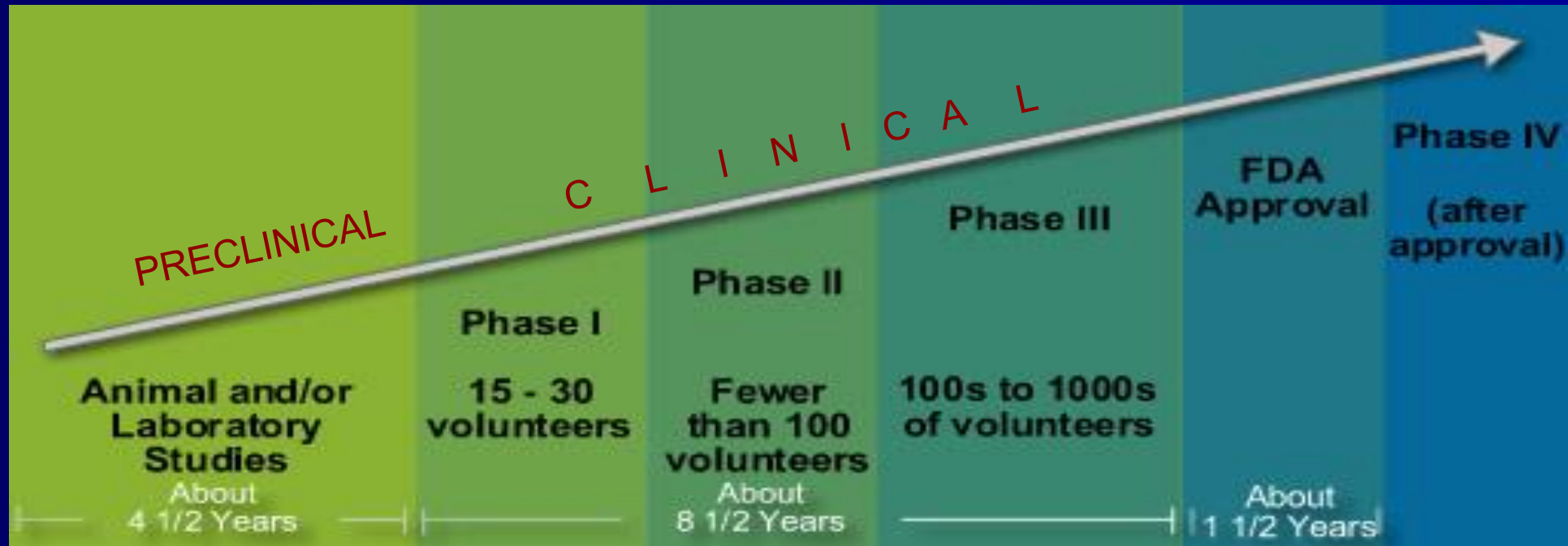
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graph TD; A[CLINICAL RESEARCH] --> B[THERAPEUTIC]; A --> C[NON-THERAPEUTIC];
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CLINICAL
RESEARCH

THERAPEUTIC

NON-
THERAPEUTIC

PHASES OF CLINICAL RESEARCH



Tolerability

Pharmacokinetics

Pharmacodynamics

Effectiveness

Dosage, Safety

Comparison

Effectiveness

Side effects

Comparison

Side effects

RESEARCH AND ETHICS

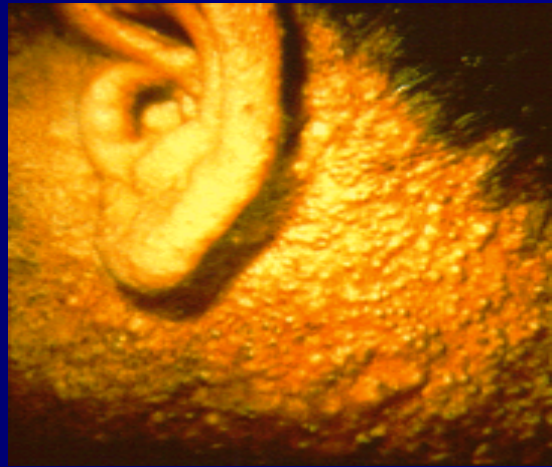


**WHY BOTHER ABOUT ETHICS IN
RESEARCH ?**

WHY ?

- ❑ PROTECTION OF PARTICIPANTS
- ❑ SAFEGAURD AGAINST EXPLOITATION
- ❑ ENSURE RESPECT OF INDIVIDUALS, DIGNITY, COFIDENTIALITY AND PRIVACY
- ❑ ENSURE GOOD CLINICAL PRACTICE IN RESEARCH
- ❑ SAFEGAURD AGAINST VIOLATIONS IN RESARCH AND RESEARCH MISCONDUCT

HORRENDOUS EXPERIMENTS



Prisoners of war



تجاوزات في البحوث الطبية

الأطباء العشرة الأكثر شهرة عبر التاريخ



جوزيف مينغل
Josef Mengele

بسبب كونه ضابطاً في الجيش الألماني إضافة لكونه طبيباً نازياً فإنه على الأرجح الاسم الأكثر شهرة في هذه القائمة. اشتهر الدكتور مينغل بـ "ملاك الموت" كما لقب أيضاً بـ "الشیطان الجمیل"، وكان مكلفاً بوضع تقارير عن السجناء يحدد فيها أي منهم هو الأصلح للبقاء على قيد الحياة ليُستعبد ومن هو في غاية الضعف ليتم إعدامه. لم يكن عمله هذا في تحديد مصير ملايين الناس هو السبب في انتشار صيته فقط بل إن هناك أمراً آخر لعب الدور الهام في شهرته الكبيرة خلال التاريخ، حيث ثبت إجراؤه تجارب على البشر. أجرى الدكتور مينغل تجارباً جنونية في مخيم أوشويتز حيث أنه كان مهتماً جداً بدراسة الوراثة وطالما أجرى تجاربه على التوائم المتطابقة. ويقال بأنه أخذ عشرة توائم وقام بتخديرهم ومن ثم قتلهم مستخدماً الكلوروفورم، وأخذ يقوم بتشريح كل واحد منهم ليجري مقارنة بين أجسادهم، كما أنه قام بصناعة توائم ملتصقة بربط أوردها مع بعضها البعض، ولم يكتف الدكتور مينغل بذلك بل قاد أيضاً تجارباً أخرى هي الأكثر جنوناً كتغيير لون العينين بحقن الصباغ داخل القرنية، والقيام ببتن الأطراف ثم محاولة وصلها بالجسم من جديد...

NUREMBERGE CODE

- INFORMED CONSENT
- QUALIFIED RESEARCHER
- APPROPRIATE RESEARCH DESIGN
- FAVORABLE RISK/BENEFIT RATIO
- PARTICIPANT FREEDOM TO STOP

تجاوزات في البحوث الطبية

TUSKEGEE SYPHLIS STUDY



CONTINUED FOR HOW LONG?

1932-1972

1997



1978

Felby Natten

The Belmont Report

Ethical Principles and Guidelines for the Protection of Human Subjects of Research

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research



RESPECT OF HUMAN
INFORMED CONSENT

BENEFICENCE.....BENEFIT/RISK

JUSTICE ... SUBJECTS SELECTION

SOURCES OF RESEARCH ETHICS

**IS RESEARCH HALAL OR
HARAM?**

GENERAL ISLAMIC PRICIPLES RELATED TO RESEARCH ETHICS

- Devotional purposes
- Purposes of the law
- Best interest
- Preventing and eliminating harm
- Consequences
- Protecting rights
- Duty of care and caring
- Observing Moral principles and virtues
- Good treatment/dealing with people
- Observing Fighi Principles

- أولاً : تحقيق الجانب الايماني والقصد التبدي
- ثانياً : تحقيق وحفظ مقاصد الشريعة الإسلامية
- ثالثاً: تحقيق المصلحة
- رابعاً :دفع الضرر ورفع
- خامساً :تقدير المآلات
- سادساً:حفظ الحقوق
- سابعاً :تحقيق واجب الرعاية
- ثامناً :قواعد أخلاقية يجب مراعاتها
- تاسعاً :حسن الخلق في التعامل مع الناس
- عاشراً : مراعاة القواعد الفقهية

PURPOSES OF ISLAMIC SHAREA

- **PROTECTION OF RELIGION**
- **PROTECTION OF HUMAN LIFE**
- **PROTECTION OF THE MIND**
- **PROTECTION OF PROGENY**
- **PROTECTION OF PROPERTY**

IS RESEARCH **HALAL** OR **HARAM?**

EVERY THING IS PERMISSIBLE....

الأصل في الأشياء الإباحة

IS IT OBLGATORY ?

مالا يتم الواجب إلا به فهو واجب
فرض كفاية

IF AN OBLIGATION CANNOT BE COMPLETED EXCEPT
WITH **SOMETHING**, THAT (**SOMETHING**) BECOME
OBLIGATORY

TWO MAJOR PRINCIPLES

THE ACCRUEMENT OF BENEFITS جلب المصالح

THE WARDING OFF OF HARM درء المفسد

FIVE GRAND PRINCIPLES

INTENT IS ALL-IMPORTANT IN ACTION

الأمر بمقاصدها

CERTAINTY CANNOT BE REMOVED BY
DOUBT

اليقين لا يزول بالشك

HARSHIP ENGENDERS FACILITATION

المشقة تجلب التيسير

HARM SHOULD BE REMOVED

لا ضرر ولا ضرار

CUSTOM IS THE RULE

العادة محكمة

The care Principle

"You all a shepherd who is responsible for all of his herd"

“كلکم راع وکلکم مسؤول عن رعیته“

Research ethics guidelines and regulations

International

[WHO Good Clinical Practice Guidelines](#)

[ICH Good Clinical Practice](#)

[ICH Guidelines on control groups](#)

[TDR Operational Guidelines for Ethics Committees](#)

[UNAIDS Guidance Document on HIV vaccine trials](#)

CIOMS GUIDELINES

European

Convention on Human Rights and Biomedicine, Council of Europe

Explanation to Convention on Human Rights and Biomedicine

Convention on Data Protection, Council of Europe

Data Protection Directive, European Union

Directive on good clinical practice in the conduct of clinical trials, EU

Nuffield Council Report

European Group Ethics: Ethical Aspects of Clinical Research in Developing Countries

Ethical Conduct for Research Involving Humans

US

Belmont Report

US Federal Guidelines

NBAC report: Ethical and policy issues in
international research: Clinical trials in developing
countries

Others

Ethical guidelines for Biomedical Research on
Human Subjects of the Indian Council of Medical
Research

Canada's Tri-Council's Policy Statement

ARE THESE ISLAMIC ?



ETHICAL REQUIREMENTS

ETHICAL REQUIREMENTS

- **Scientific Value**
- **Scientific validity**
- **Respect of Potential and enrolled subjects.**
- **Favourable risk-benefit ratio**
- **Fair subject selection**
- **Independent Review**
- **informed consent**

(*JAMA*. 2000;283(20):2701-2711.
doi:10.1001/jama.283.20.2701)

■ **Observance of sharia principles and law**

■ **Observance of the local laws/policies**

ETHICAL REQUIREMENTS

SCIENTIFIC VALUE:

- Responsible use of finite resources
- Avoidance of exploitation
- Not to expose human being to potential harms without some possible social or scientific benefit
- Prioritization

SCIENTIFIC VALIDITY:

- Use accepted scientific principles and methods to produce reliable and valid data.

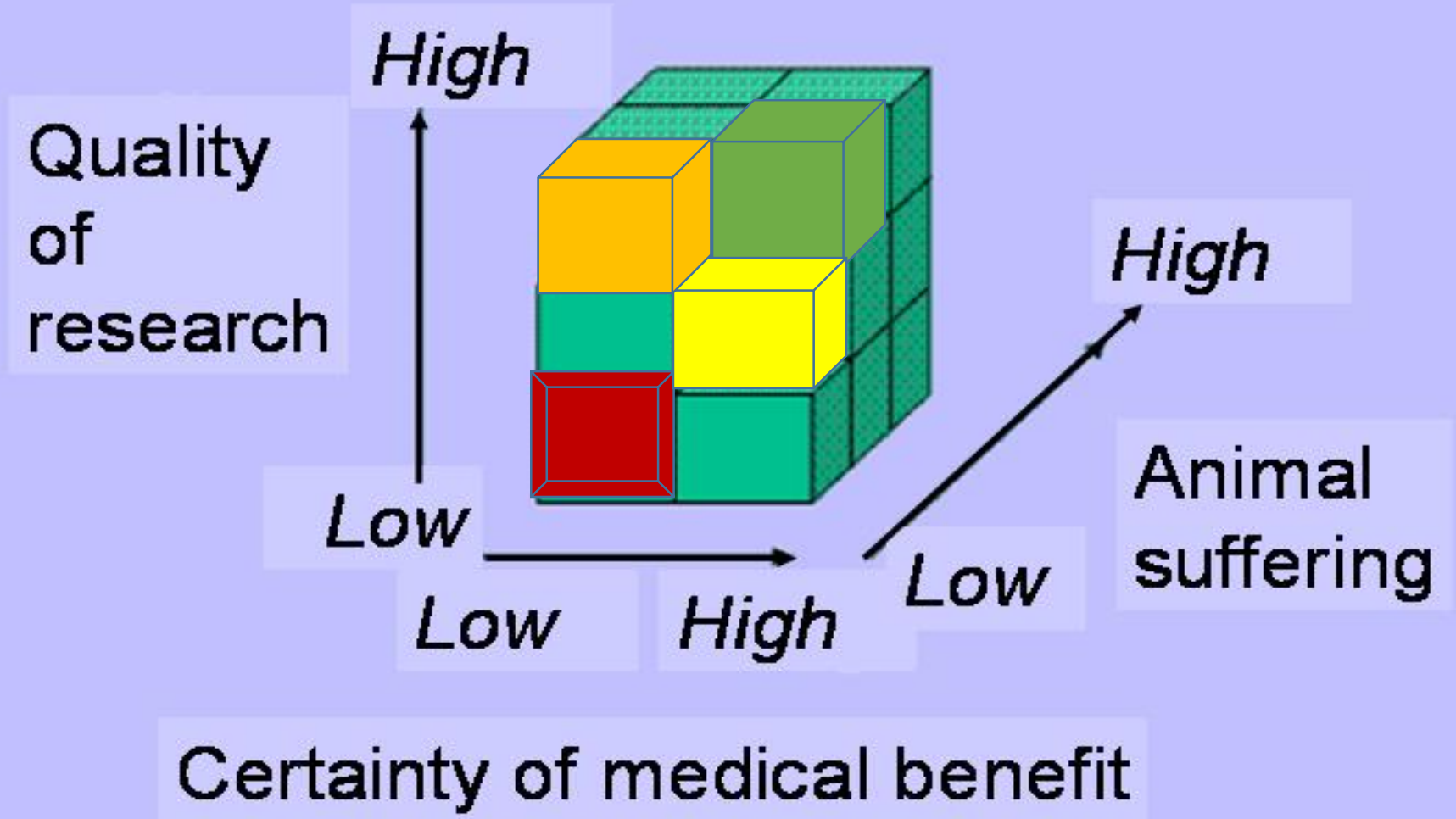
FAIR SUBJECT SELECTION

- Selection of subjects so that stigmatized and vulnerable individuals are not targeted for risky research
 - (JUSTICE)

FAVOURABLE RISK – BENEFIT RATIO

- Minimizing Risk
- Enhancement of Potential benefits
 - “Non- Maleficence , Beneficence”

BATESON'S CUBE



RESPECT FOR SUBJECTS

- Permitting withdrawal

- Protecting privacy
- New risks or benefits
- Result of clinical research
- Maintaining welfare of subjects
 - “Autonomy and rights”

INFORMED CONSENT

”لا يجوز لأحد التصرف في ملك الغير
إلا بإذنه“

“NO ONE IS ALLOWED TO ACT UPON
THE PROPERTY OF AN INDIVIDUAL
UNLESS HE TAKES HIS PERMISSION”

INFORMED CONSENT

- **Informed consent is consent given by a competent individual who received the necessary information, who has adequately understood the information, and who after considering the information, has arrived at a decision without been subject to coercion, undue influence or inducement or intimidation.**

Guidelines for CIOMS

INFORMED CONSENT

Is a **process** by which an individual **voluntarily** expresses his or her willingness to participate in a particular study, after having **been informed** of all aspects of the study that are relevant to the decision to participate

INFORMED CONSENT

- INFORMATION

- UNDERSTANDING/COMPREHENSION

- CONSENT/VOULTAIRNESS

شروط الاذن

CONDITIONS OF INFORMED CONSENT

أن يكون الإذن صادراً ممن له
الحق،

RIGHT

أن يعطي الإذن وهو على بينة
وإدراك
(البصيرة)

COGNIZANCE

أن يكون الآذن أهلاً للإذن والأهلية
تعتبر بوجود أمرين أحدهما:
البلوغ والثاني العقل

CAPACITY

الاختيار , وعدم الإكراه

VOLUNTAIRENESS

أن يكون الاجراء مأذون بها شرعا

**LAWFULL
PROCEEDURE**

ELEMENTS OF INFORMED CONSENT (IC)



“The biggest risk in this study is just reading the consent form!”

ESSENTIAL ELEMENTS

- A statement that the study involves **research**
- A description of any reasonably foreseeable **risks or discomforts** to the subject.
- A description of any expected **benefits** to the subject or to others.
- A disclosure of **appropriate alternative** procedures or courses of treatment, if any

ESSENTIAL ELEMENTS

- Assurance of *confidentiality*
- A statement about *compensation*
- *Contact* details
- Assurance of *voluntairness* of participation

ADDITIONAL ELEMENTS

- Unforseeable risks
- Termination of participation
- Additional costs
- Consequences of withdrawal
- Significant new findings
- Number of participants

IC READIBILITY

- LANGUAGE:

LANGUAGE OF PARTICIPANTS

EXPLANATION/ INTERPRETATION

SIMPLE LANGUAGE

- LEGIBILITY

- AVOID MEDICAL JARGON

WAIVER OF INFORMED CONSENT

- **Minimal risk**
- **Rights and welfare of participants protected**
- **Research not possible without a waiver**
- **Appropriate information provided**

Observance of sharia principles and law

■ **INDEPENDENT REVIEW**

- Proposed subject population
- Review design
- Risk – Benefit Ratio
 - “Conflict of interest”

Observance of the local laws/policies

المملكة العربية السعودية



مدينة الملك عبدالعزيز
للعلوم والتقنية KACST

اللجنة الوطنية للأخلاقيات الحيوية

اللائحة التنفيذية لنظام أخلاقيات

البحث على المخلوقات الحية

THE RESEARCHER VIRTUES

SINCERITY/FAITHFULNESS

OBSERVANCE OF ALLAH

INTEGRITY/HONESTY



INTEGRITY/HONESTY

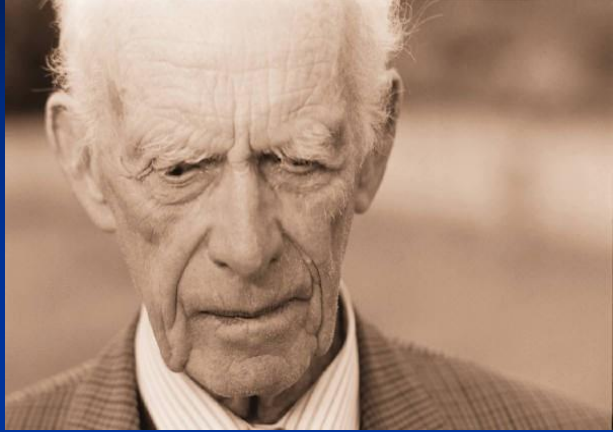
- **ORIGINALITY OF THE STUDY**
- **REVIEW OF PREVIOUS STUDIES**
- **TRUTHFULNESS ABOUT THE BENEFITS & RISKS**
- **SCIENTIFIC CAPABILITY**
- **SCIENTIFIC INTEGRITY**
- **IMPARTIALITY**
- **APPROPRIATE RESEARCH TEAM**
- **OBSERVING RIGHTS OF COLLABORATORS**

RESEARCH ON SPECIAL (VULNERABLE) GROUPS

A “vulnerable participant” is any individual who lacks the ability to fully consent to participate in a study.

http://www.virginia.edu/vpr/irb/sbs/resources_guide_participants_vuln.html

VULNERABLE GROUPS



Types of vulnerability

- PHYSICAL
- SOCIAL
- COGNITIVE/COMMUNICATIVE
- ECONOMIC
- INSTITUTIONAL

Thank
You

