WHO does not have a general official policy on advanced health technologies and medical ethics.

WHO's various health policies defined by its governing body resolutions collectively make up a strong policy framework that can be applied to advanced health technologies and medical ethics.

Is this framework enough or should we ask the EB/WHA to pass a resolution on advanced health technologies?
WHO supports (advanced) health technologies provided

- They promote health
- They provide equal access to health services
- They respect human rights (dignity and freedom)
- Their consequences are understood and can be controlled
- They make no harm
ADVANCED HEALTH TECHNOLOGIES

- Information and communication technologies
- Transplantation
- Genomics
  - Human cloning
  - Gene therapy
- Pharmaceuticals
- Vaccines
- Nano technologies
ETHICS THEORY IS ABOUT "GOOD ACTS"

What makes an act good?

Advanced technology is something very "hard" and concrete.

Ethics is something very "soft" and abstract.

Challenge:
How do they apply to each other?
Use ethics theory as a conceptual framework to discuss major ethical principles that guide health systems and services and relate advanced health technologies to those principles.
CLASSES OF ETHICS THEORY
ADVANCED HEALTH TECHNOLOGIES AND MEDICAL ETHICS - A WHO PERSPECTIVE

Virtue ethics

The basic idea is that the virtues will guide us on what we are about to do.

What is morally important is the duty and the rules associated with the act.

The ultimate criterion of what is morally right, wrong, obligatory etc., is the "nonmoral" value that is brought into being.

An act is right if and only if it produces, at least as great a balance of good over evil as any available alternative.

Utility should be maximized only if it possible does good while preventing harm.

Deontological ethics

Teleological ethics

(Consequence ethics)

Principle of UTILITY

Principle of BENEFICENCE
UN CHARTER (1945)
UNIVERSAL DECLARATION OF HUMAN RIGHTS (1948)
WHO CONSTITUTION (1948)

These encourage WHO and countries to
• work for the highest standards of health
• while at the same time applying a principle of justice, respect for freedom, human dignity and equity.
WHO DEFINITION OF HEALTH

Health is a state of complete physical, mental and social well being and not merely absence of disease or infirmity.

Health is something that can be achieved, restored or maintained.

Health is a consequence (a "nonmoral" value).
Health systems and services

-should provide:
  • more goods than evils for the patients (utility)
  • above all not to harm the patient (beneficence)

- should respect:
  • the dignity and freedom of the individual (rules of obligation)
  • provide for universal and equal access (rules of obligation).

Health systems and services should

• be cost-effective (utility)
• have high quality (utility)

• be safe (beneficence)
• be accessible (rules of obligation)
Use ethics theory as a conceptual framework to discuss major ethical principles that guide health systems and services and relate advanced health technologies to those principles.
Technologies are solutions being integrated into already existing health systems and services.

As health systems and services are designed to comply with the ethics principles, their streamlining through the integration of technologies into them most often only reinforces the principles.
WHO supports (advanced) health technologies provided

They promote health

That is:

Their claimed benefits should be evidence based
They should be safe
They should be quality assured and controlled
They should be cost-effective
WHO supports (advanced) health technologies provided

They promote health

They provide equal access to health services
Investment in technologies by poor countries should not divert precious and stretched resources away from their obligation to meet basic needs of their citizens.

More than 90% of advanced health technologies are developed in less than 10% of the countries in the World (the richest).

Developed countries represent nearly 90% of global pharmaceutical sales, whereas of the 14 million global deaths due to infectious diseases, 90% occur in the developing countries.

More than 90% of all medical technology research is addressing health problems affecting less than 10% of the population of the World (the richest).
INTELLECTUAL PROPERTY RIGHTS

The TRIPS Agreement – (Trade Related Aspects of Intellectual Property Rights)
-seeks progressively to introduce global minimum standards

The Doha Declaration on the TRIPS Agreement
-recognizes that health products need to be treated differently in certain circumstances

Possible mechanisms to strengthen access
• relaxed patent requirements
• tiered pricing
• voluntary licensing
• compulsory licensing
• bulk purchasing
• corporate donations
WHO supports (advanced) health technologies provided

They promote health

They provide equal access to health services
WHO supports (advanced) health technologies provided

They promote health
They provide equal access to health services
They respect human rights (dignity and freedom)
Many eHealth applications are ethically highly commendable and unproblematic. But not all.

- **Effect**
  - Improved cost-effectiveness
    - Examples: Geographical health information systems; hospital information systems; electronic health records
    - Ethical principle: Utility
  - Improved quality
    - Examples: ePrescription of drugs; computer assisted decision support
    - Ethical principle: Utility
  - Improved patient safety
    - Examples: Electronic alerts as elements of health care procedures; computer controlled radiation treatment of cancer
    - Ethical principle: Beneficence
  - Improved access
    - Examples: Telemedicine; distance training
    - Ethical principle: Equity
Many e-health applications are ethically highly commendable and unproblematic. But not all...

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Many ehealth applications are ethically highly commendable and unproblematic. But not all

Effect

- Improved cost-effectiveness, quality and access

Examples

- Electronic exchange of personal data:
  - Electronic health records
  - ePrescription of drugs
  - Telemedicine

Ethical principle

- Human freedom and dignity
WHO supports (advanced) health technologies provided

They promote health
They provide equal access to health services
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Their consequences are understood and can be controlled
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WHO supports (advanced) health technologies provided

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Allogenic transplantation

OK

No transplantation tourism
### Xenogenic transplantation
- Make regulations

### Allogenic transplantation
- OK

### WHO supports (advanced) health technologies provided
- They promote health
- They provide equal access to health services
- They respect human rights (dignity and freedom)
- Their consequences are understood and can be controlled
- They make no harm
No body cloning

Consequences are unknown

Even attempts to control them as they might develop are disencouraged

Human body cloning is in violation with human dignity

Acceptance of body cloning implies the acceptance of some humans being better than others. This would be in conflict with the Universal Declaration of Human Rights.
What then about gene therapy and gene manipulation?

Provided their consequences were understood and could be controlled, Could this be supported?
Health is a state of complete physical, mental and social well being and not merely absence of disease or infirmity.

Utilitarianism

Pleasance = happiness

Goal

Principle of utility

Consequence
Health is a state of complete physical, mental and well being and not merely absence of disease or infirmity.

Happiness is a state of complete physical, mental and social well being and not merely absence of disease or infirmity.

WHO DEFINITION OF HEALTH

- IS AN ALMOST PERFECT EXAMPLE OF A UTILITARIAN DEFINITION OF HAPPINESS
WHO DEFINITION OF HEALTH

Constitutional definition

Health is a state of complete physical, mental and social well being and not merely absence of disease or infirmity.

De facto interpretation

Health is absence of disease or infirmity.

- And countries should support their citizens in their aspiration to obtain and sustain a state of excellent physical, mental and social well being in order to maintain or restore health.
The essence of the interpreted definition of health being absence of disease or infirmity implies that provided the absence of disease or infirmity (genes) THE HUMAN BODY (and genome) IS GOOD AS IT IS and needs not to be improved
Gene therapy or manipulation to improve the otherwise healthy human body is not supported by WHO policies (I think)

Gene replacement or repair of genes coding for disease or infirmity is supported by current WHO policies

- provided that the consequences are controlled under national regulations
FUNDAMENTAL QUESTIONS TO ALL HEALTH TECHNOLOGIES

Virtue ethics

Will the new technology will interfere with the way health care workers interact with their patients?

Deontological ethics

Will the new technology be in line with general health policies, rules and regulations?

Teleological ethics

Will the patients benefit from the new technology?
CONCLUSION

Worldwide more than 50% of all health systems development is the result of the introduction and expansion of health technologies.

WHO strongly supports technologies provided that they respect human rights and promote health.

For many technologies WHA does not have explicit WHA endorsed policies.

WHO should ask the WHA to pass a resolution on advanced health technologies.
UN charter, article 1.2

PURPOSE AND PRINCIPLES

To develop friendly relations among nations based on respect for principle of equal human rights and self-determination of peoples….
PREAMBLE

....Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity in worth of the human person and the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom…

ARTICLE 1

All human being are born free and equal in dignity and rights

ARTICLE 2.1

Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race colour, sex, language religion, political or other opinion, national or social origin, property birth or other status

ARTICLE 3

Everyone has the right to life, liberty and security of person
Health is
a state of complete physical,
mental and social well being
and not merely
absence of disease or infirmity

ACCES TO ADEQUATE HEALTH SERVICES IS A HUMAN RIGHT