



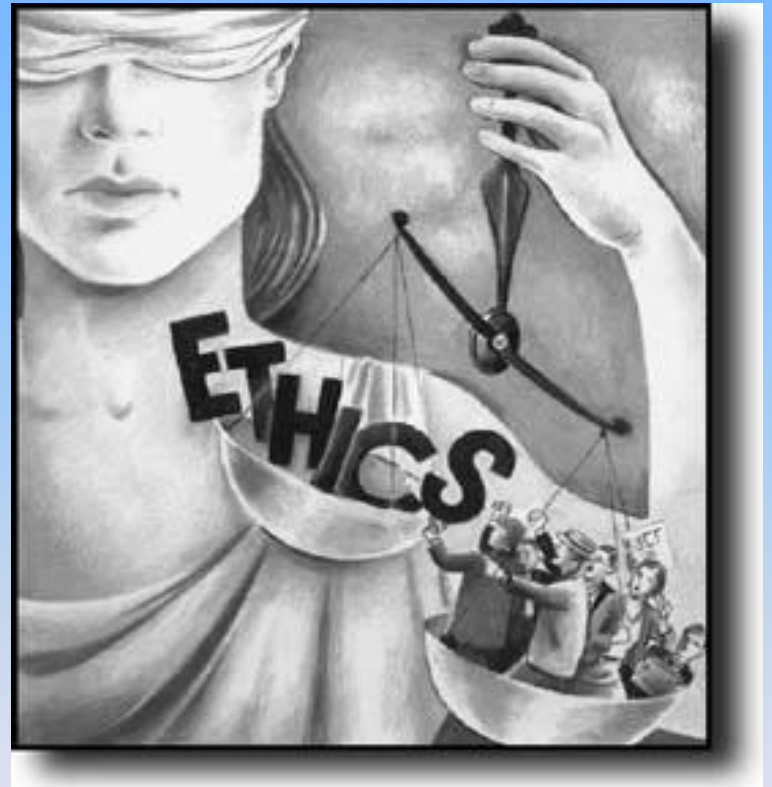
BIOETHICS: SUBJECT AND PURPOSE OF STUDY. MAIN BIOETHICAL THEORIES AND PRINCIPLES. ETHICAL ISSUES IN MODERN MEDICINE.

PLAN

1. Definition of terms “ethics” and “bioethics”.
2. Subject of study.
3. Importance of bioethics.
4. Principles in medical ethics.
5. Ethical theories.
6. Ethical issues in modern medicine.

What is “ethics”?

Ethics: “the rules of conduct recognized in respect to a particular class of human actions or a particular group, culture”



Bioethics: “a field of study concerned with the ethics and philosophical implications of certain biological and medical procedures, technologies, and treatments, such as organ transplants, genetic engineering, and care of the terminally ill”





Bioethics is both a word and a concept. The word comes to us only from 1970 yet the concept comes from human heritage thousands of years old. Bioethics is love of life, balancing benefits and risks of choices and decisions. This heritage can be seen in all cultures, religions, and in ancient writings from around the world.

SUBJECT OF STUDY



Bioethics is the study of the ethical issues raised by the biological and medical sciences, and of questions of life and death as they arise in the context of healthcare. It seeks to address question such as:

- Is there a difference between killing and 'letting die'?
- Is there anything wrong with human cloning?
- Does society have an obligation to provide universal healthcare?
- What are the social and political implications of the new genetic technologies?

SUBJECT OF STUDY

It is a fact of modern life that most individuals will, at some stage of their lives, face decisions which involve fundamental questions in bioethics. Whether it's choosing whether or not to have a child, deciding to become an organ donor, considering being tested for a genetic condition, or making a decision about the care of elderly parents, most of us will not be able to avoid confronting bioethical issues.



SUBJECT OF STUDY

Some of the most controversial and important public issues today are also questions of bioethics:

What should the law say about abortion?

Is there enough funding for public hospitals?

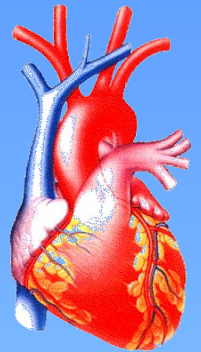
Should the government fund stem cell research involving human embryos?



A knowledge of bioethics will empower you to make these decisions and to participate in these debates in an informed, critical and effective manner.



A classic bioethical decision



- One heart available who should get it?

17-year old girl



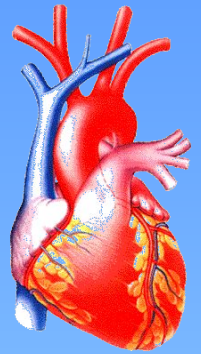
40-year-old school
principal



70-year-old woman



A classic bioethical decision

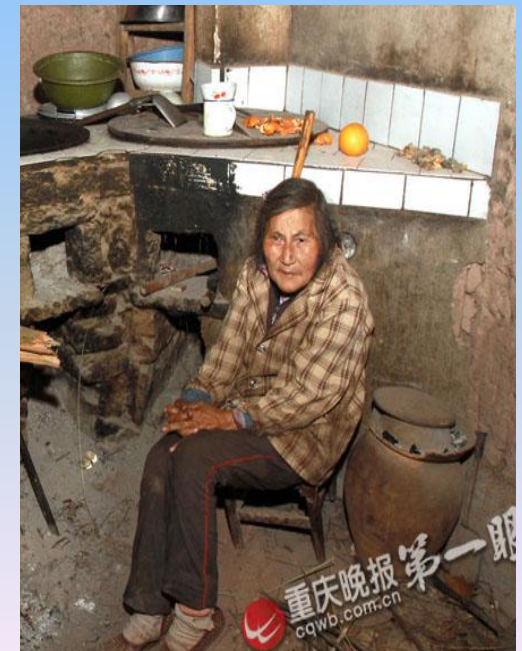


- One heart available who should get it?

17-year old girl

40-year-old man

70-year-old woman



IMPORTANCE OF BIOETHICS

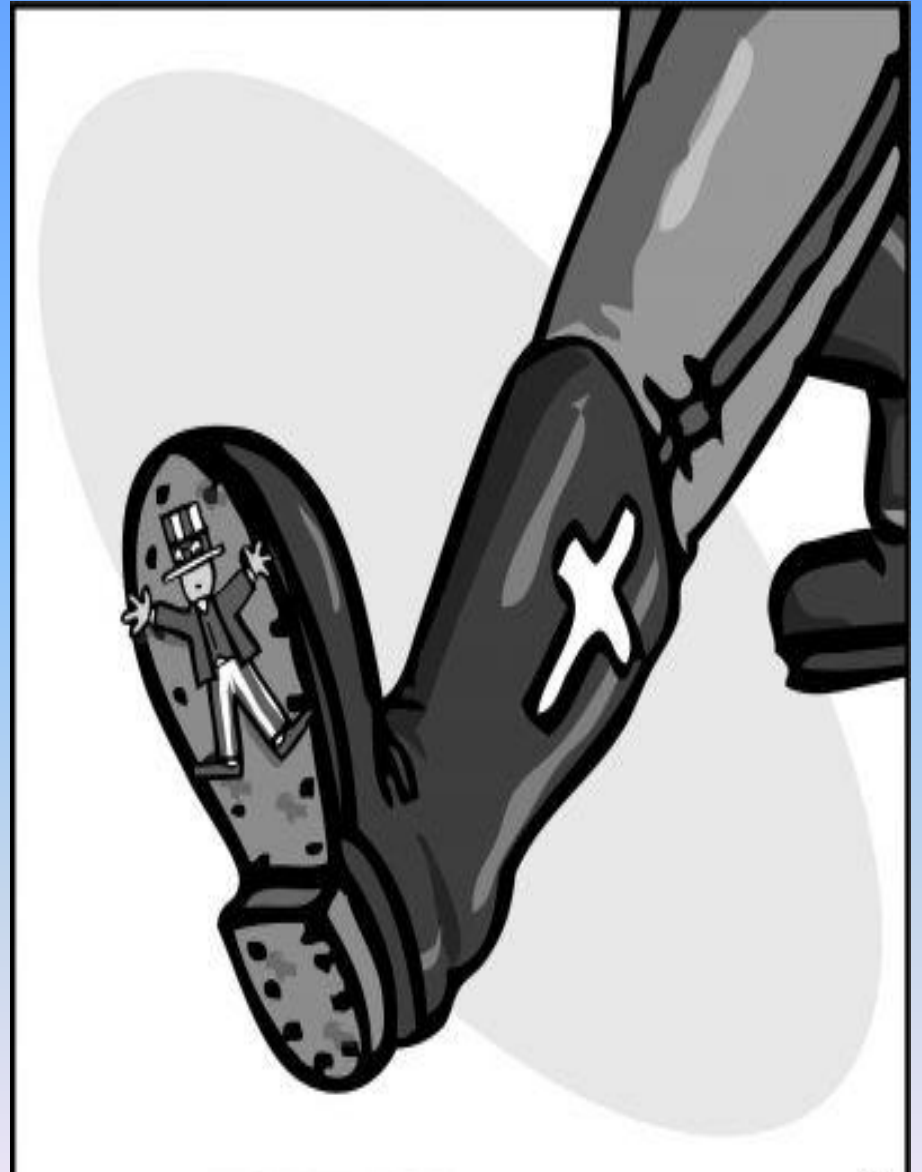
Ethics is not the study of what is legal or socially accepted or tolerated; it is the study of what is right and wrong.



**"Wrong is Wrong even
if everyone is doing it.
Right is Right even if
no one is doing it."**

There are wrong or morally bad laws and rules.

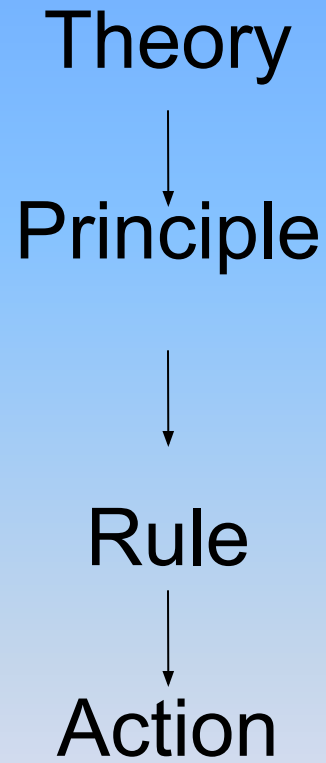
Sometimes they are so bad that obedience to them is a greater moral transgression than disobedience.



Ethical theories and principles are the foundations of ethical analysis.

Ethical principles are the common goals that each theory tries to achieve in order to be successful.

ETHICAL THEORY...TO ACTION



Principles in medical ethics

Autonomy - the patient has the right to refuse or choose his treatment.

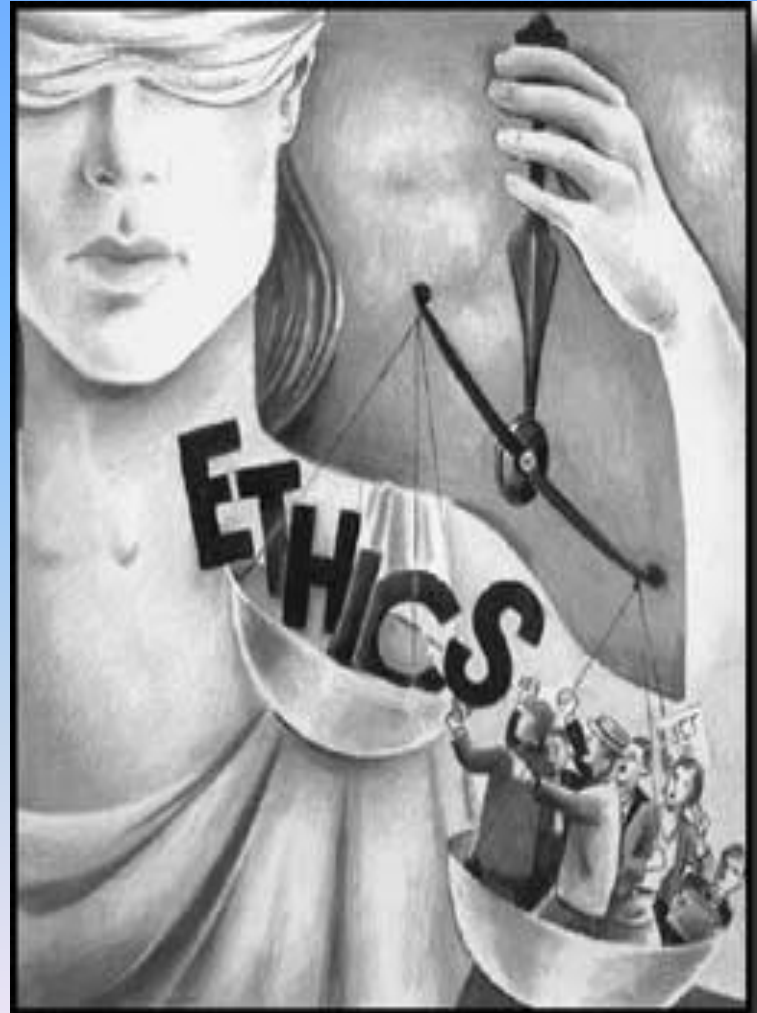
(Voluntas aegroti suprema lex.)

Beneficence - a practitioner should act in the best interest of the patient.

(Salus aegroti suprema lex.)

Non-maleficence - "first, do no harm" (*primum non nocere*).

Justice - concerns the distribution of scarce health resources, and the decision of who gets what treatment (fairness and equality).



Principles in medical ethics

When moral values are in conflict, the result may be an ethical dilemma or crisis.



Beneficence

The term beneficence refers to actions that promote the well being of others.

In the medical context, this means taking actions that serve the best interests of patients.



Beneficence

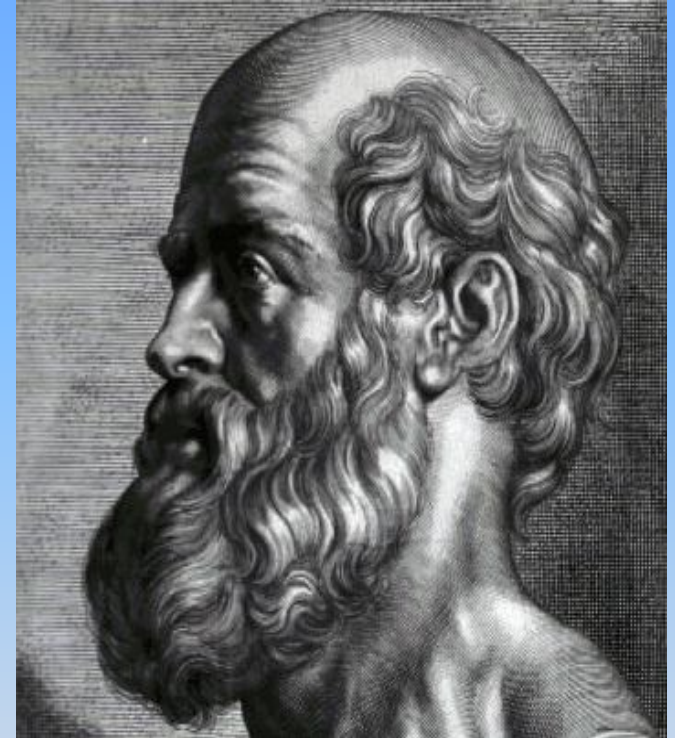
These duties are viewed as self-evident and are widely accepted as the proper goals of medicine.

The author of this principle –
PARACELSUS.



The Principle of Non-maleficence

This is similar to beneficence, but deals with situations in which neither choice is beneficial. In this case, a person should choose to do the least harm possible and to do harm to the fewest people.



"As to diseases, make a habit of two things - to help, or at least, to do no harm."

Hippocrates

Non-Maleficence

"The treatment was a success, but the patient died."

Kill as Few
Patients
as Possible



FIRST DO NO HARM

Respect for Autonomy

In the paternalistic viewpoint, an authority prioritizes a dependent person's best interests over the dependent person's wishes.



Respect for Autonomy

A second way in which to view the respect for autonomy is the libertarian view. This standpoint prioritizes the patient's wishes over their best interests.



CASE 1: JEHOVAH'S WITNESS

- 16 year old male
- Car accident
- Requires surgery
- Parents will not allow blood products to be used
- Patient refuses blood products



	Whole Blood	Major Blood Fractions	Fractions of Major Blood Fractions	% of its component	% of whole blood	Specifically mentioned as acceptable km06 Nov
Prior to 1945	Yes 100%	Yes 100%	Yes 100%			
1945 to 1982	No 100%	No 100%	No 100% [#]			
1982 to 2000	No 100%	No 100%	Yes for some fractions			
Post 2000	No 100%	No 100%	Yes 100%			
	Blood 100%	Plasma 55.50%*	Water 91.00% Albumin 4.00% Immunoglobulins 3.00% Clotting Factors 0.50% Other - Vitamins, Gas, Waste, Hormones 1.50% Hemoglobin 35.00% Hemin 2.00% Other 63.00% Interferons 0.01% Other 99.99% Other 100.00%	50.51% 2.22% 1.67% 0.28% 0.83% 14.35% 0.82% 25.83% 0.00% 3.00% 0.50%		
		Red 41.00%	Between 1945 and 1982 fractions were not permissible; w61 9/15 p.559 "Whether whole or fractional, one's own or someone else's, transfused or injected, it is wrong."			
		White 3.00%				
		Platelets 0.50%				
	NO to Blood	NO when blood is fractionated to its major components	YES once major components fractionated	Some fractions acceptable since g82 6/22 p.25 100% of fractions acceptable since w00 6/15 w04 6/15		

Justice

Justice in health care defined as a form of fairness, or as **Aristotle** said, "*giving to each that which is his due.*"

Persons who are equals should qualify for equal treatment



JUSTICE

In fact, our society uses a variety of factors as a criteria for distributive justice, including the following:

- to each person an equal share
- to each person according to need
- to each person according to effort
- to each person according to contribution
- to each person according to merit
- to each person according to free-market exchanges

JUSTICE

John Rawls and others claim that many of the inequalities we experience are a result of a "natural lottery" or a "social lottery". One of the most controversial issues in modern health care is the question pertaining to "who has the right to health care?"



Double effect

Double effect is usually regarded as the combined effect of beneficence and non-maleficence.

MORPHINE

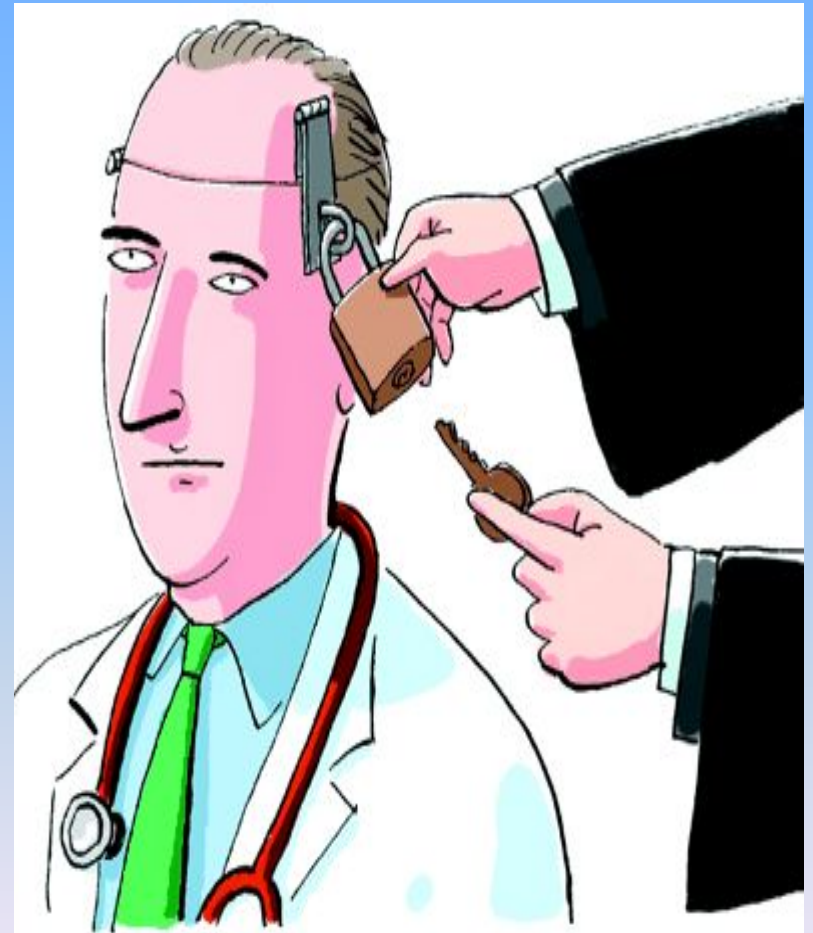
Beneficial effect - easing the pain and suffering of the patient,

Maleficent effect - hastening the death of the patient through suppression of the respiratory system.



Confidentiality

Confidentiality is commonly applied to conversations between doctors and patients. This concept is commonly known as patient-physician privilege. Legal protections prevent physicians from revealing their discussions with patients, even under oath in court.



Ethical Theories

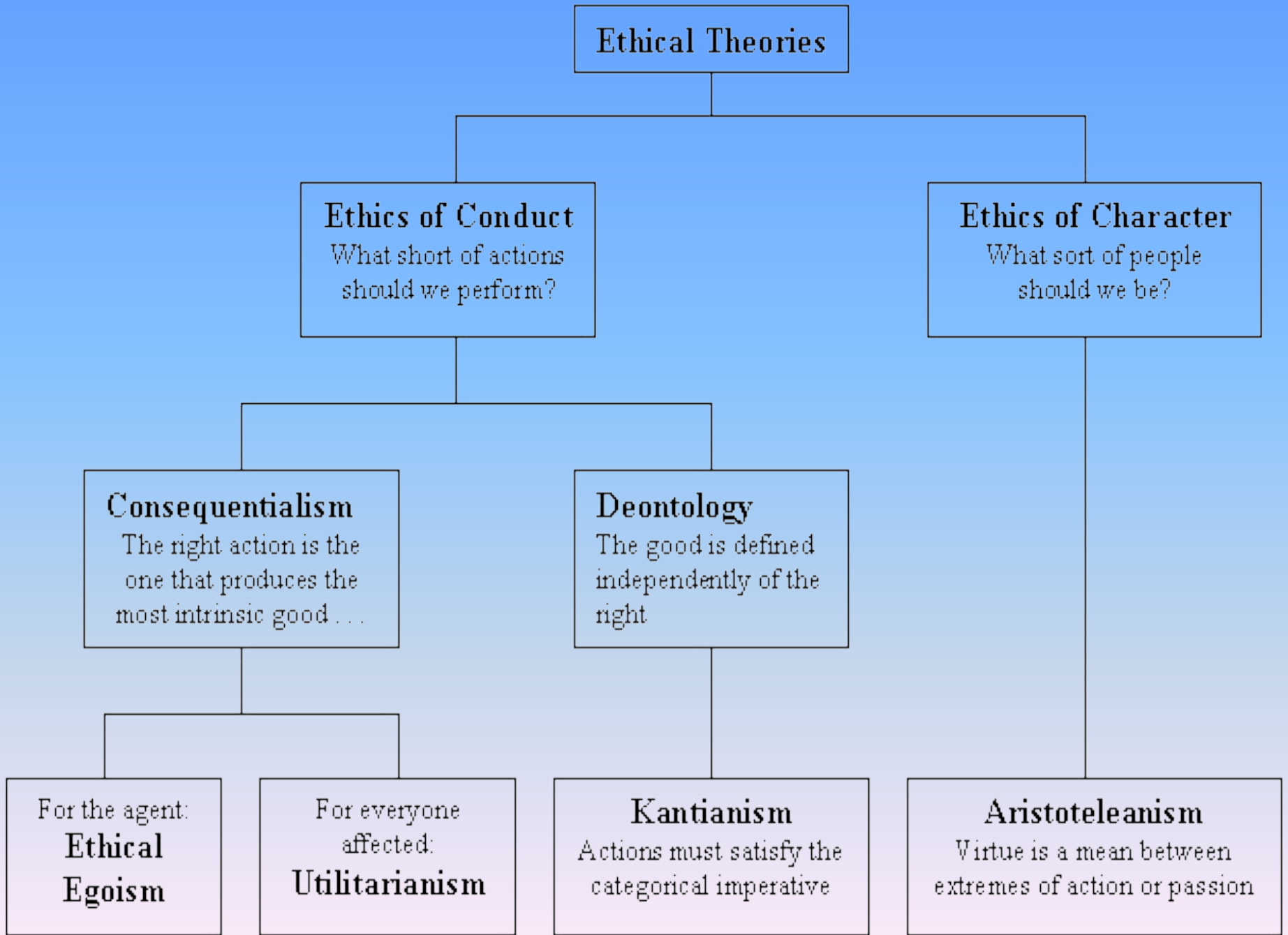
Ethical theories are based on the previously explained ethical principles.

People usually base their individual choice of ethical theory upon their life experiences

Two approaches to ethical theory

Ethical theory in turn divides into two main types or approaches:

- virtue ethics: begins by considering what makes a person (or his/her character or motives) morally good (Aristotle, Hume)
- duty ethics: focuses on rules or acts and what makes them right (Mill, Kant, Rawls)



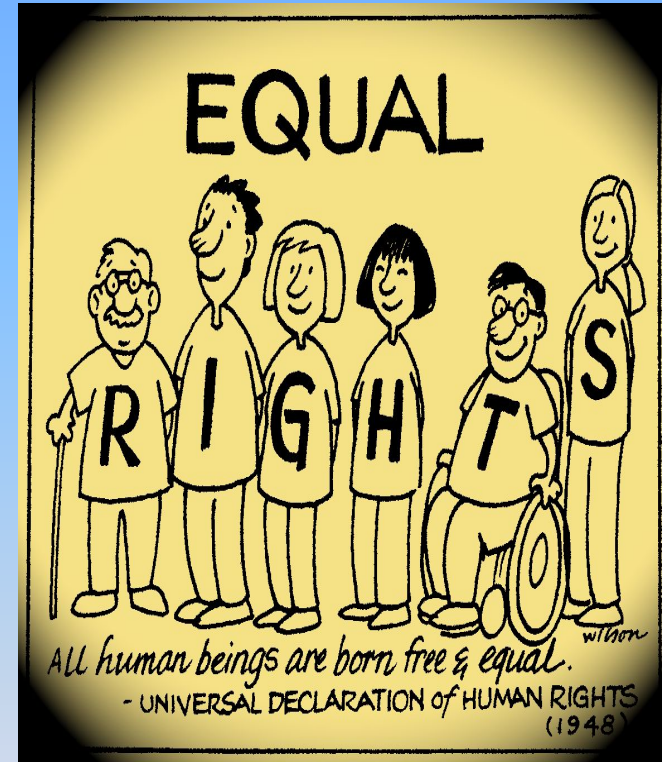
Deontological ethics

Deontological, or duty-based, ethical systems, are those that simply claim, what the fundamental ethical duties are.

The Ten Commandments - examples of deontological ethical thinking. The Ten Commandments say that some actions are just plain right and others are just plain wrong.



This is what characterizes deontological ethical methods: they simply state that some things are right or wrong. Some things are your duty to do (Greek *deon*: duty) and other things are your duty to avoid. **Human Rights documents**, for example, are instances of deontological thinking.



CONSEQUENTIALISM

Teleological methods, sometimes called **consequentialist**, are based on estimating what the likely outcomes of a given course of action will be, and then choosing the method that has the most positive consequences and the fewest negative consequences.



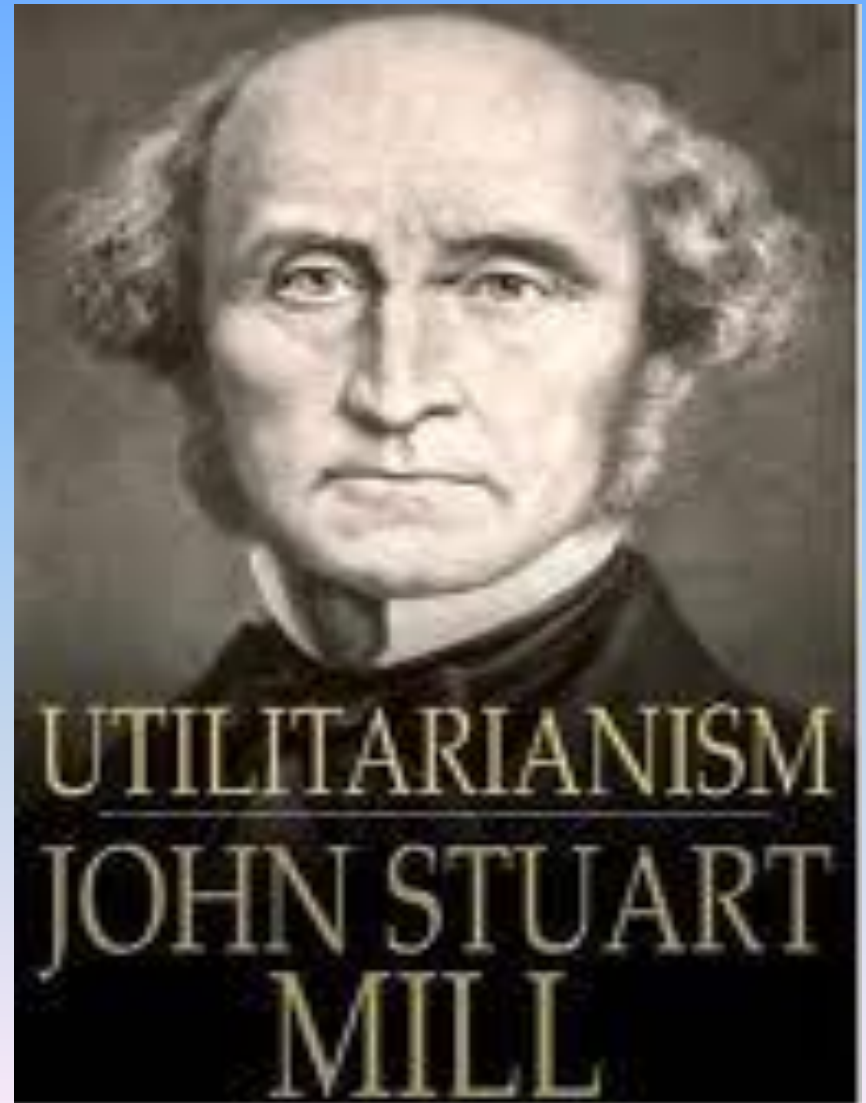
ETHICAL EGOISM

- **A moral theory that contends all choices either involve or should involve self-promotion as their sole objective.**
- **Ethical egoists believe that people should not be their brother's keeper, because people do not completely understand the true needs of others.**
- **It's every man for himself in this world!**



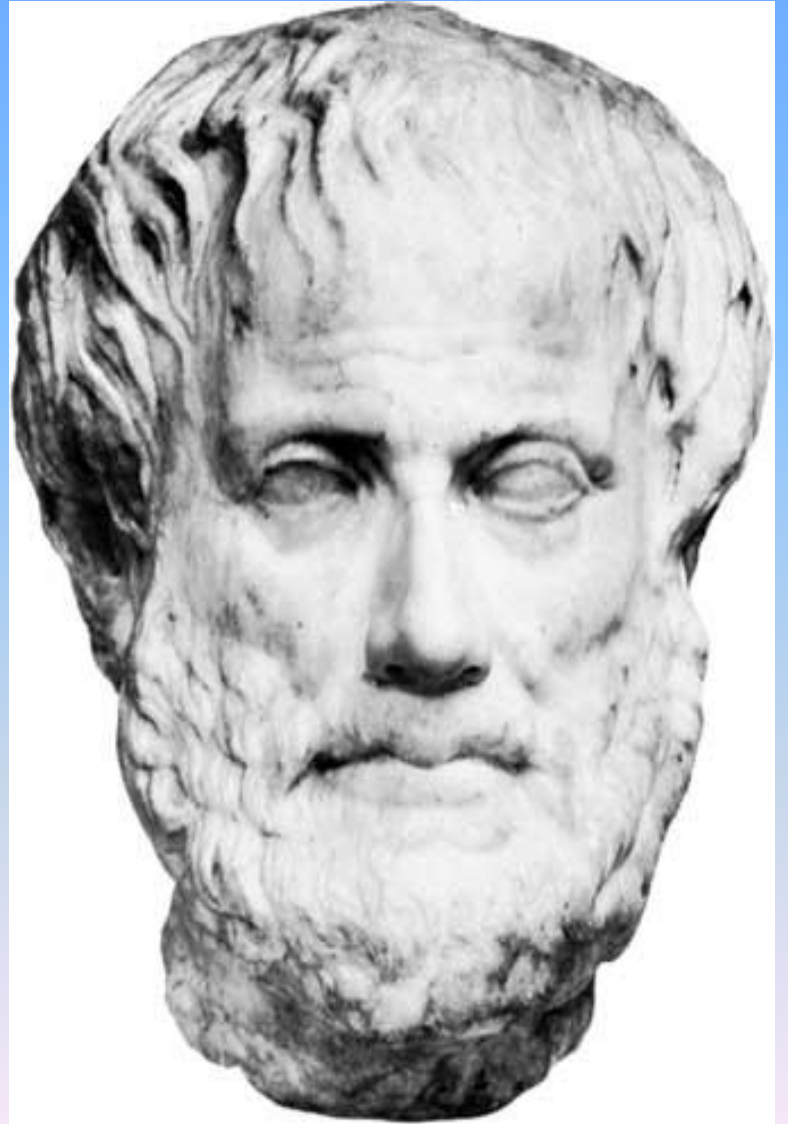
Utilitarian Theories

- Moral theories that assert an action's rightness is determined by the actual or probable consequences that the action will have for the greatest number of people affected by that action.
- An action or practice is right if it leads to the best possible balance of good consequences over bad consequences for all the parties affected.



Aristotleanism

The ancient Greek philosopher Aristotle sought to describe what characteristics a virtuous person would have, and then argued that people should act in accordance with these characteristics.



- Virtuous traits are acquired and developed throughout our life experiences.
- A primary problem with this theory is that people have varying definitions of what traits are considered virtuous.
- One weakness of this ethical theory is that it does not take into consideration a person's change in moral character.



Prima facie duties

When a person tries to decide how to act, each of these duties need to be taken into consideration when deciding which duty should be acted upon.



Frances Kamm

"Principle of Permissible Harm"

*The Principle states
that one may harm in
order to save more if
and only if the harm is
an effect or an aspect
of the greater good
itself.*



CASE 2: VOLLEYBALL PLAYER

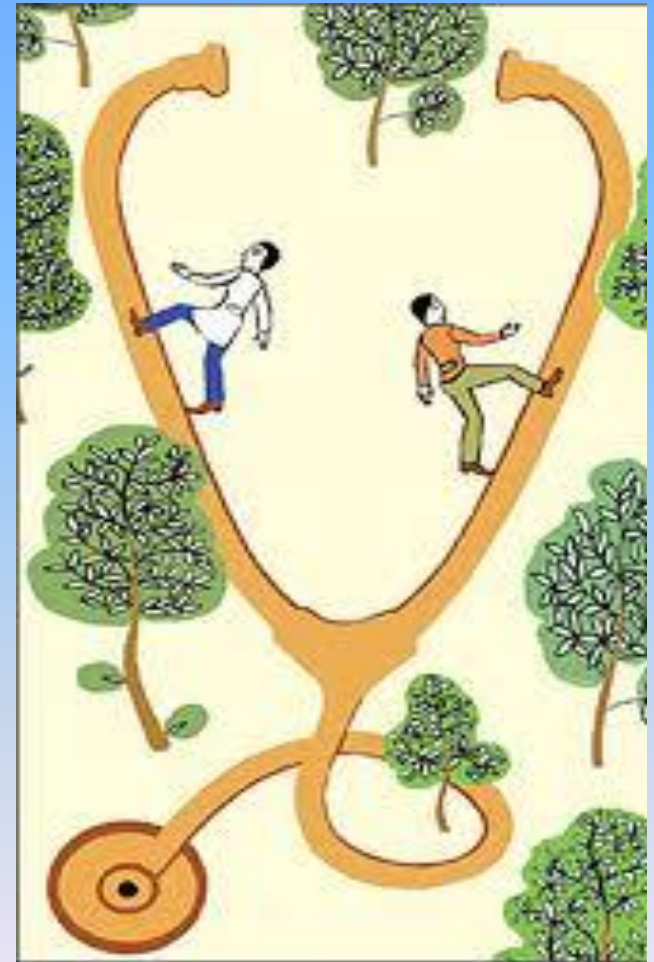
- Infection in her leg
- 60% Chance of recovery with antibiotics alone
- 80% Chance of recovery with antibiotics and amputation of the leg
- Parents want doctors to amputate the leg, patient would like to only take antibiotics

Physician-Patient Relationship.



Ethical concerns over doctor-patient relationship

- Autonomy and patient choice
- Patient right Vs patient interest
- Integrity of the medical profession
- Shared decision-making in medical intervention



What constitutes a person's autonomy?

Three aspects of autonomy

1. Freedom of thought
2. Freedom of will
3. Freedom of action

Conflicting Values

- **Paternalism:**
 - The doctor should act in a way that protects or advances the patient's best interests, even if it is against the patient's will.
- **Patient autonomy:**
 - The doctor should help the patient to make real choice, and provide intervention under the constraints of (a) informed consent and (b) confidentiality.

Difficult cases for doctors: some examples

- Active and passive euthanasia
- Right to refuse treatment
- DNS (Do-not-resuscitate) order
- Abortion
- Experimental/risky interventions

Ethical models at a glance

1. Paternalistic model
2. Informative model
3. Interpretive model
4. Deliberative model

Paternalistic model

1. Principle
 - The doctor should make all the decisions for a patient.
2. Assumptions
 - People are not always rational/mature.
 - Experts know better about the needs of patients.
 - Qualified doctors have good will.
3. Sources
 - Hippocratic Oath; Plato.
4. Problems
 - Are the needs of patients objective? How can we be sure that doctors have good will?

Informative model

1. Principle

- The doctor should provide all the relevant information for the patient to make a decision, and provide the selected intervention on this basis.

2. Assumptions

- A fact/value division of labor yields the best medical result.
- What is good for a patient depends on what his/her personal values.
- Consumerism.

3. Problems

- What if the patient is unconscious, incompetent, and making choices totally unacceptable by our ethical standards?

The interpretive model

1. Principle
 - The doctor should help the patient to articulate his/her values through interpretation, and provide intervention which is truly wanted.
2. Assumptions
 - Patients have unconscious and inconsistent desires.
 - Their conscious decisions may not reflect their deepest values.
3. Limitation
 - All that a doctor can do is to help the patient see his/her own desires/values more clearly, but not to criticize them.

The deliberative model

1. Principle
 - The doctor should help the patient to deliberate well through dialogue and discussion, and so develop values which are objective and truly worthy.
2. Assumptions
 - The objectivity of values.
 - The patient's good life consists not in the satisfaction of desires, but maturity and rationality.
3. Problems
 - Is the model different from the paternalistic model? What is the difference between dialogue and persuasion?

CASE 3: PAIN RELIEF IN HOSPICE

- 86 year old man
- Pancreatic Cancer
- Hospice and Palliative Care
- Refuses all pain medication
- Staff and other patients are upset at “screams of agony”

ETHICAL ISSUES IN MODERN MEDICINE.



Advance Directives

A living will tells how you feel about care intended to sustain life. You can accept or refuse medical care. There are many issues to address, including

- The use of dialysis and breathing machines
- If you want to be resuscitated if breathing or heartbeat stops
 - Tube feeding
 - Organ or tissue donation



What is Genetic Engineering?

- **Scientific alterations in human possibilities**
 - Gene Therapy
 - Stem cell research
 - Human cloning
- **Scientific alterations in animal and plant life**
 - Modified grains tolerant of disease and drought
 - Cloned animals



Cloning

The most famous clone was a Scottish sheep named Dolly.

There are three different types of cloning:

Gene cloning, which creates copies of genes or segments of DNA

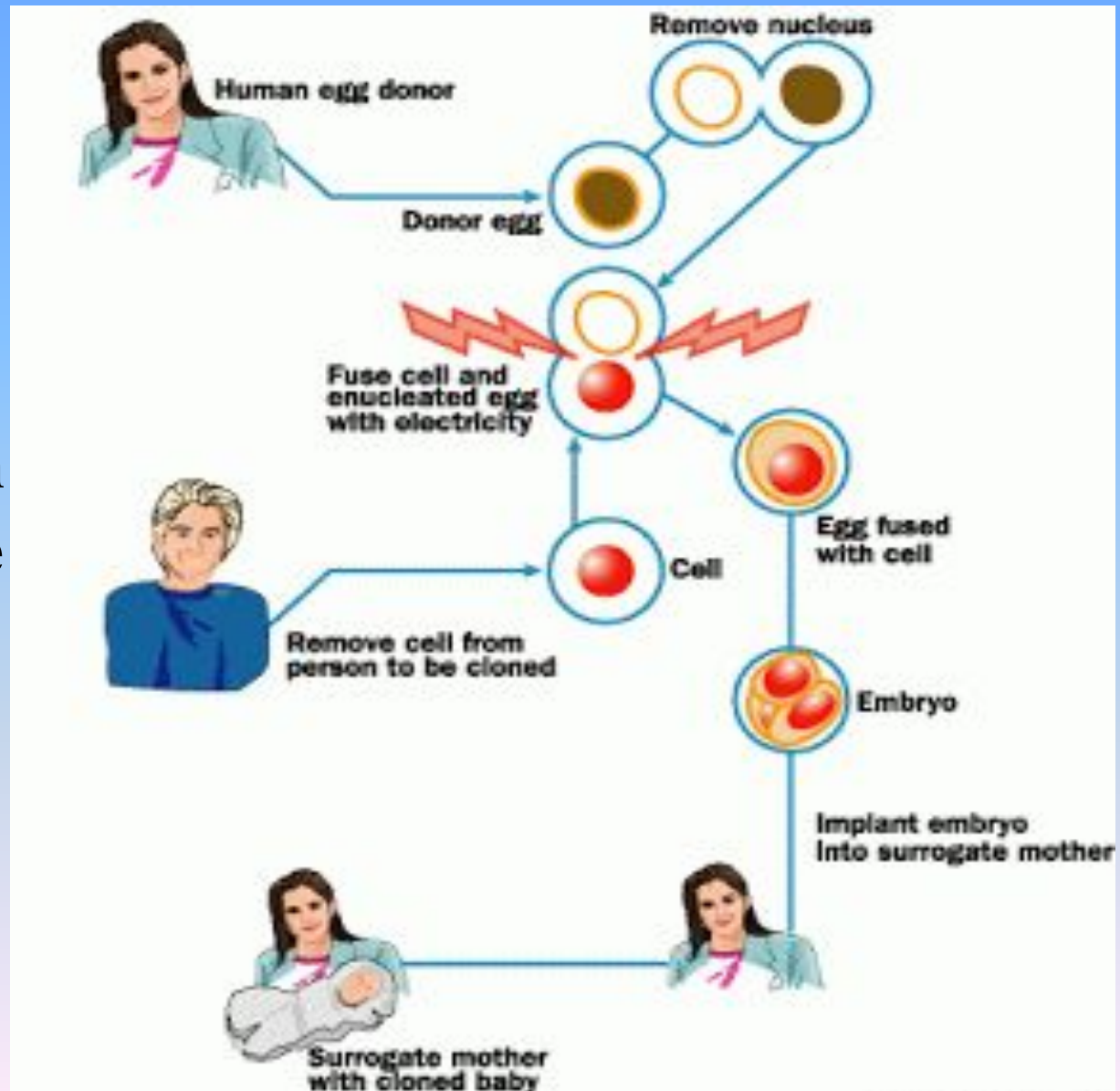
Reproductive cloning, which creates copies of whole animals

Therapeutic cloning, which creates embryonic stem cells. Researchers hope to use these cells to grow healthy tissue to replace injured or diseased tissues in the human body.



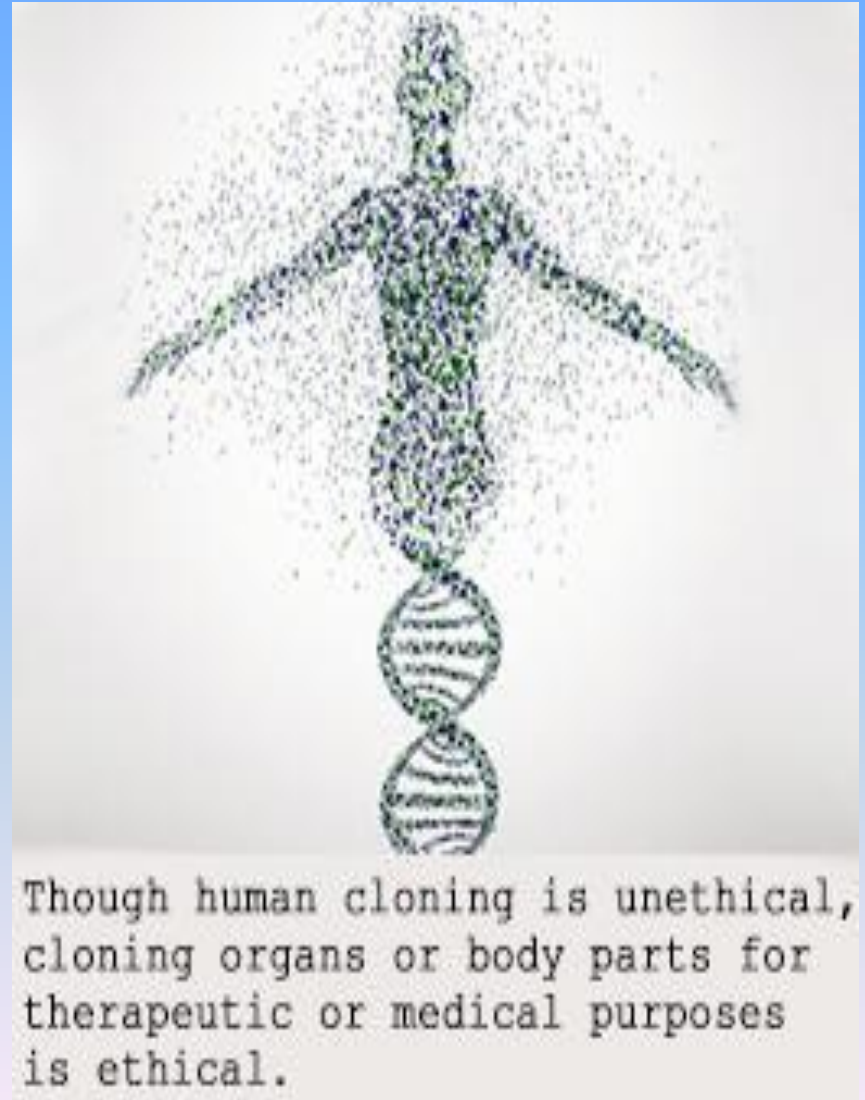
Why clone humans?

- Creating replacement tissue (spare parts)
- Producing a fully developed human being for infertile couples
- Reproducing outstanding humans in history



Moral and Legal Issues of Cloning

- Do people have a right to reproduce by any available means?
- Do other societal concerns override any such rights?
- Will there be harmful effects on the cloned twin?
- How will family relationships be redefined?
- Could persons be cloned without their consent?
- Would cloning be immoral because it is “unnatural”?



Genetic Testing

Genetic tests are tests on blood and other tissue to find genetic disorders. About 900 such tests are available. Doctors use genetic tests for several reasons. These include:

- Finding possible genetic diseases in unborn babies
- Finding out if people carry a gene for a disease and might pass it on to their children
 - Screening embryos for disease
 - Testing for genetic diseases in adults before they cause symptoms
- Confirming a diagnosis in a person who has disease symptoms



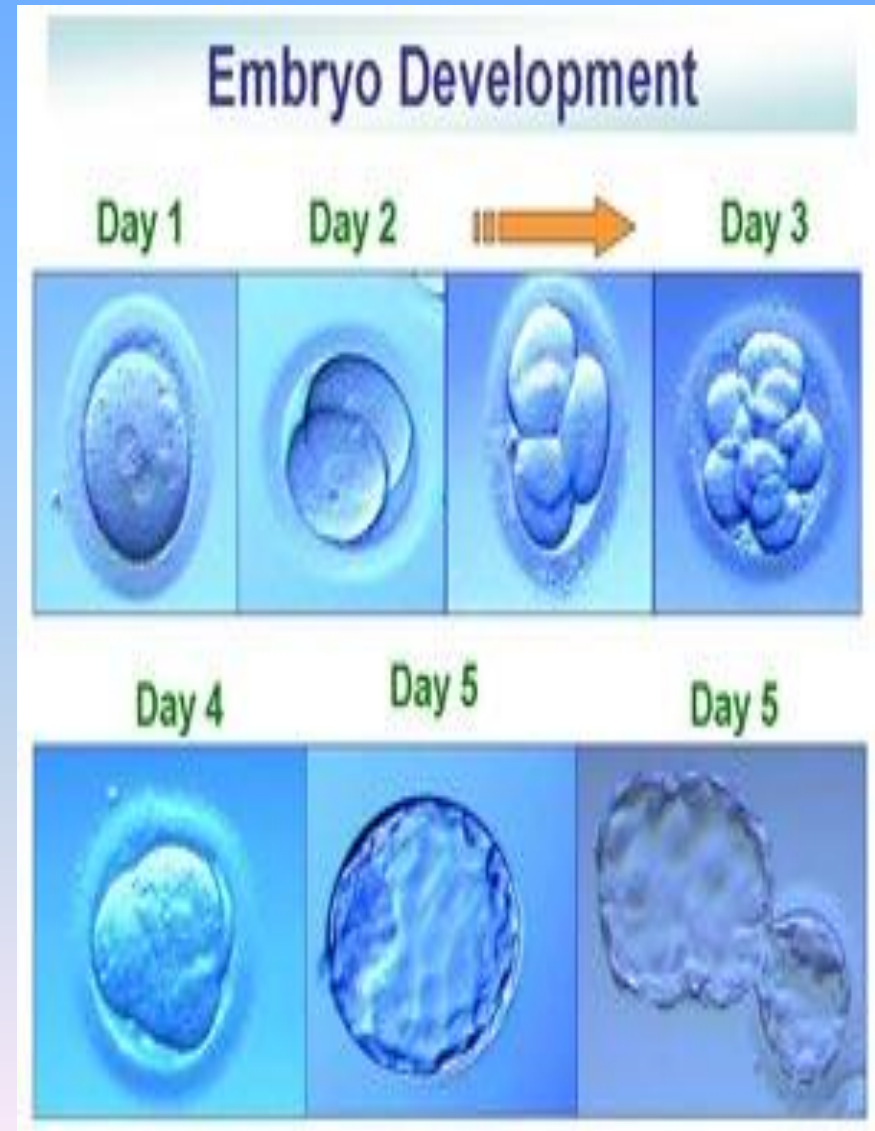
Current IVF embryo policy

- What is an IVF clinic?
 - Place where a couple can go after difficulty conceiving a child
 - Woman's eggs extracted; man contributes sperm
 - Woman's egg fertilized in-vitro
 - Outside her body
 - Embryos inserted into her uterus pregnancy



Current IVF embryo policy

- Left-over embryos
 - IVF procedure generates many embryos to increase chances of success
 - Usually get thrown out or frozen
 - BUT, stem cells can be derived from these!



Current IVF embryo policy

- Which is ethically “better”?
 - Throwing out an extra embryo, OR
 - Saving the embryo for adoption, OR
 - Using the embryo for biomedical research?
- How do we find a compromise?



What diseases do we do stem cell research on first?

Muscular dystrophy
likely to die by age 20



VS.



Spinal cord injuries
paralyzed, but likely to live longer

What diseases do we do stem cell research on first?

- Spinal cord injuries
- Alzheimer's disease
- Type II (adult) diabetes
- Multiple sclerosis
- Type I (juvenile) diabetes
 - Heart disease
 - Cancer
- Parkinson's disease
- Mental illness



Complementary and Alternative Medicine



Biologically based approaches

Diets
Herbs
Vitamins



Manipulative and body-based therapies

Massage
Chiropractic
Osteopathy

Field
Magnets
Qigong

Energy therapies

Common CAM practices

Yoga
Spirituality
Relaxation

Mind-body interventions

Homeopathy
Naturopathy
Ayurveda

Alternative medical systems



Organ Donation

Organ donation takes healthy organs and tissues from one person for transplantation into another. Experts say that the organs from one donor can save or help as many as 50 people. Organs you can donate include

Internal organs: Kidneys, heart, liver, pancreas, intestines, lungs

Skin

Bone and bone marrow

Cornea

Most organ and tissue donations occur after the donor has died. But some organs and tissues can be donated while the donor is alive.

People of all ages and background can be organ donors.



Abortion

Whether or not it is moral, should abortion be legal?

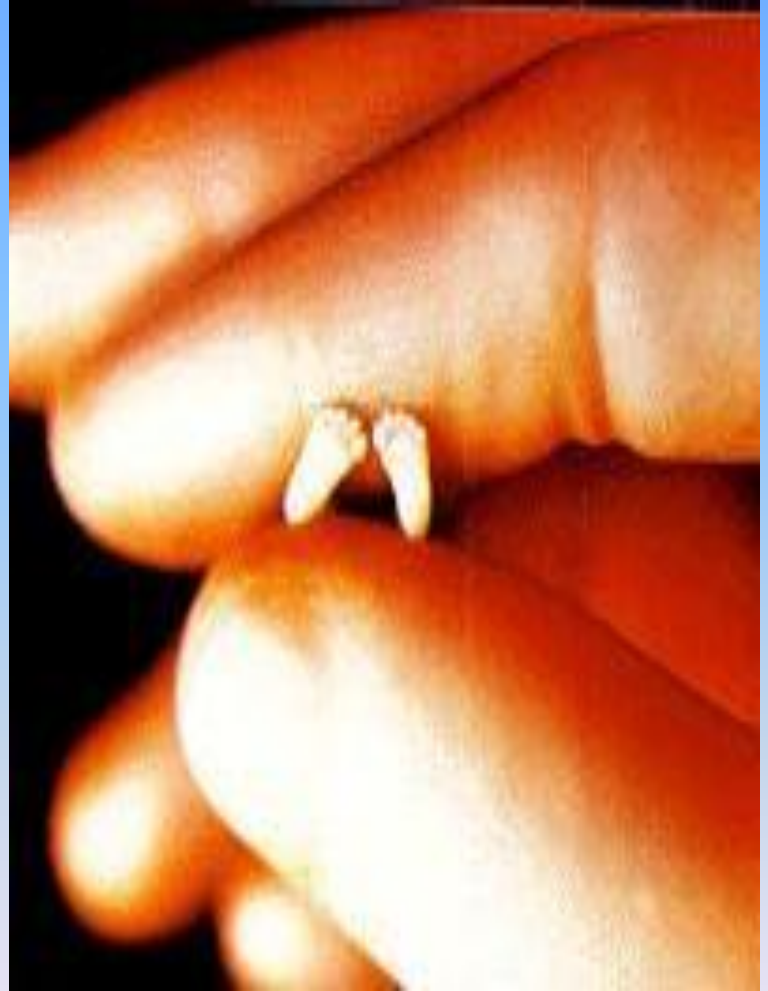
Generally prohibited but with some exceptions?

Should it be regulated?

Is it a free choice to seek abortion in desperation because of poverty, violence, or lack of support?

What should be the community and policy response to women who feel unable to give birth to their children?

And what is the role of the father in decisions about abortion?



*Thank you for your
attention!*