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SNV /STU faculty

Biology department

M1 immunology

Bioethics

Tutorial 3

Exercise 1: Principles of Bioethics

1. Which principle of bioethics emphasizes the obligation to cause no harm?

- A) Autonomy
- B) Beneficence
- C) Non-maleficence
- D) Justice

2. The principle of autonomy in bioethics means:

- A) Patients must always follow the advice of healthcare professionals.
- B) Patients have the right to refuse or choose their treatment.
- C) Equal distribution of healthcare resources.
- D) Preventing harm to the patient.

3. Which of the following is NOT considered a basic principle of bioethics?

- A) Fidelity
- B) Beneficence
- C) Autonomy
- D) Justice

4. In the context of bioethics, justice primarily refers to:

- A) Punishing unethical behavior in medical practice.
- B) The moral obligation to obey laws and regulations.
- C) The fair distribution of healthcare resources.
- D) Ensuring that all patients receive the same treatments.

5. Case Study: A patient with a terminal illness requests assistance in dying. How does the principle of autonomy apply, and what ethical dilemmas might arise?

(Provide a brief analysis considering autonomy, potential conflicts with other ethical principles, and legal considerations.)

Exercise 2: Clinical Ethics

1. Informed consent is essential for:

- A) Only surgical procedures.
- B) Any medical treatment or procedure.
- C) Only experimental treatments.
- D) Dispensing over-the-counter medication.

2. A 16-year-old requests birth control without parental consent. Which ethical principle is MOST challenged in this scenario?

- A) Beneficence
- B) Autonomy
- C) Non-maleficence
- D) Justice

3. Which scenario best illustrates the principle of non-maleficence?

- A) A doctor decides not to disclose a terminal diagnosis to a patient to avoid causing distress.
- B) A doctor provides a life-saving treatment to a patient without their consent.
- C) A doctor refuses to perform a procedure that could potentially harm the patient.
- D) A healthcare provider allocates resources based on the severity of the patient's condition.

4. Confidentiality in healthcare is ethically important because:

- A) It is a legal requirement in all countries.
- B) It ensures that personal health information is shared with insurance companies.
- C) It respects patient autonomy and trust.
- D) It allows for public health authorities to access personal data easily.

5. Case Study: A healthcare professional discovers that a colleague has made a significant error in prescribing medication to a patient. Discuss the ethical considerations involved in deciding whether to report the error.

(Consider principles such as non-maleficence, justice, and professional integrity.)

Exercise 3: Research Ethics

1. Which of the following is a fundamental ethical requirement for conducting research on human subjects?

- A) Obtaining government approval
- B) Ensuring the research has commercial potential
- C) Obtaining informed consent from participants
- D) Guaranteeing the success of the research

2. The use of placebo in clinical trials is ethically controversial primarily because:

- A) It may deprive participants of effective treatment.
- B) It guarantees the success of the research.
- C) It is more expensive than active treatment.
- D) Participants prefer active treatment over placebo.

3. Which principle is MOST directly concerned with ensuring that the benefits and burdens of research are distributed fairly among participants?

- A) Autonomy
- B) Beneficence
- C) Justice
- D) Non-maleficence

4. In research ethics, the concept of 'vulnerability' refers to:

- A) The likelihood that the research will fail.
- B) Participants' susceptibility to harm or coercion.
- C) The financial status of the research institution.
- D) The complexity of the research design.

5. Case Study: A research study aims to test a new drug for a serious disease prevalent in a low-income country. Discuss the ethical considerations regarding participant recruitment, informed consent, and the distribution of benefits.

(Consider principles such as justice, beneficence, and respect for persons.)

Exercise 4: Public Health Ethics

1. Mandatory vaccination policies raise ethical questions primarily about the balance between:

A) Autonomy and non-maleficence.

B) Beneficence and justice.

C) Autonomy and beneficence.

D) Justice and non-maleficence.

2. The principle of least infringement suggests that public health policies should:

A) Only be implemented with unanimous public support.

B) Use the least coercive means necessary to achieve public health goals.

C) Prioritize individual freedom over public safety.

D) Ensure that all interventions are permanent.

3. Which of the following best represents an ethical dilemma in public health?

A) Allocating a limited supply of flu vaccines during an epidemic.

B) Requiring medical professionals to wash their hands.

C) Promoting exercise and healthy eating.

D) Funding research into rare diseases.

4. Public health surveillance is ethically justified when:

A) It respects individual privacy and confidentiality to the extent possible.

B) It is used to monitor the private lives of citizens.

C) It collects data without informed consent.

D) It benefits the government more than the public.

5. Case Study: A city faces a severe outbreak of a contagious disease. Public health officials propose a lockdown to control the spread. Discuss the ethical considerations involved in implementing the lockdown, considering principles such as autonomy, justice, and beneficence.

(Analyze the balance between individual rights and public health needs.)

Exercise 5: Environmental Ethics and Bioethics

1. The concept of 'One Health' emphasizes the interconnection between:

A) Human health, animal health, and environmental health.

B) Different healthcare systems around the world.

C) The health of individuals and public health policies.

D) Traditional medicine and modern medical practices.

2. Environmental justice is concerned with:

A) The distribution of environmental benefits and burdens across different communities.

B) Promoting the use of renewable energy sources.

C) Protecting endangered species.

D) Encouraging recycling and waste reduction.

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3. Which statement best reflects the ethical principle of sustainability in bioethics?

A) Future generations have the same rights to resources and a healthy environment as the current generation.

B) Natural resources should be used exclusively for medical research.

C) Sustainability is not a concern of bioethics.

D) Economic growth should be prioritized over environmental protection.

4. The precautionary principle in environmental ethics suggests that:

A) Actions that risk environmental harm should be postponed until they are proven safe.

B) Economic benefits justify environmental risks.

C) Environmental policies should be based solely on scientific consensus.

D) Immediate action is not necessary to prevent environmental damage.

5. Case Study: A biotech company develops a genetically modified organism (GMO) that could significantly increase food production but may have unknown environmental impacts. Discuss the ethical considerations from a bioethical perspective, focusing on principles such as the precautionary principle, sustainability, and justice.

(Consider the potential benefits and risks to human and environmental health.)