

Applied Ethics : Bioethics

Origins, Principles, and Cases

Wk-2

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Lecture Overview : What We Will Explore

How Did Bioethics Emerge?

- From the ancient Hippocratic Oath to the atrocities of the 20th century.
- We will examine the pivotal historical cases, such as Nuremberg and Tuskegee, that fundamentally shaped the modern field of bioethics.

The Georgetown Mantra :

- An in-depth exploration of the four core principles: Autonomy Beneficence, Non-maleficence, and Justice.
- Learn the structured methodology for applying this framework to complex clinical scenarios.

Lecture Overview : What We Will Explore, Cont.

Six Life-and-Death Cases :

- Applying the Principlism framework to analyse critical issues including abortion, surrogacy, physician-assisted death, euthanasia, CRISPR gene editing, and the challenge of AI bias in healthcare.

Summary and Reflection :

- A critical evaluation of the strengths and limitations of Principlism.
- We will conclude with guided reflection questions designed to deepen your personal understanding of these complex ethical dilemmas.

“Bioethics was forged in response to horror — and refined through careful reasoning”.

Chapter 1 : How Did Bioethics Emerge?

Origins, Development, and Historical Cases



1.1 ORIGINS : Pre-20th Century Roots

1. Hippocratic Oath : c. 400 BCE.

- Core Principle: "First, do no harm" (non-maleficence)
- The original oath also **prohibited surgery, abortion, and euthanasia** — demonstrating that medical ethics has always been deeply value-laden and context-dependent.

2. Thomas Percival : 1803

- Wrote the **first modern medical ethics code** for the Manchester Infirmary, marking a shift toward institutional standards.
- Focus: Physician conduct and hospital etiquette, not patient rights.
- **Key Limitation :**

Professional Guild Codes

- ❖ These early codes were fundamentally **doctor-centered**, not patient-centered.
- ❖ They served to protect the profession's reputation and standardise practice among peers.

1.1 ORIGINS : Pre-20th Century Roots, Cont.

- ❖ They operated on the assumption that **physicians knew best** and patients should obey.
- ❖ The concept of patient autonomy or informed consent was absent.

The physician was the guardian; the patient was the ward.

1.2 The Catalyst: The Nuremberg Doctors' Trial (1946–1947)

What Happened :

- Nazi physicians conducted **lethal experiments** on concentration camp prisoners without their voluntary consent.
 - High-altitude chambers
 - Freezing experiments
 - Infectious disease injection

The Outcome :

- **The Nuremberg Code (1947) :**
 - ❖ "The voluntary consent of the human subject is absolutely essential."
 - ❖ For the first time in history, **patient/subject autonomy was placed above physician authority.**

1.2 The Catalyst: The Nuremberg Doctors' Trial (1946–1947), Cont.

❖ This was revolutionary.

Why It Was Revolutionary :

- ❖ Shifted power from physician to patient.
- ❖ Established informed consent as a fundamental right.
- ❖ Created international ethical standards.
- ❖ Made research ethics legally enforceable.

Key Principle : Autonomy > Authority

- ❖ The patient has the right to say no, even to a physician.

1.2 The Catalyst: The Tuskegee Syphilis Study (1932–1972)

What Happened :

- ❖ The U.S. Public Health Service studied **399 Black men with syphilis** in Macon County, Alabama.
- ❖ Told participants they had "bad blood" and were receiving free medical care.
- ❖ In reality, they received **placebos only**.
- ❖ Even after **penicillin became a cure in 1947**, treatment was withheld.
- ❖ Men died, went blind, and infected their wives and children.

Outcome :

- ❖ The **Belmont Report (1979)** and the creation of **Institutional Review Boards (IRBs)**.

1.2 The Catalyst: The Tuskegee Syphilis Study (1932–1972), Cont.

Key Lesson :

- ❖ Atrocities happen not only in Nazi Germany but also in American democracy, driven by **racism and bureaucratic neglect**.

Why It Was Revolutionary :

- **Racism in Research:** Exposed how systemic racism corrupted scientific inquiry and medical ethics.
- **Informed Consent:** Demonstrated that disclosure alone is insufficient — understanding and voluntariness are essential.
- **Oversight Need:** Led to mandatory ethical review of all research involving human subjects.

"The study revealed that ethical violations are not just historical aberrations" — they can persist for decades .

1.3 Development : The Birth of Modern Bioethics

1947 - Nuremberg Code :

- Informed consent becomes an international standard

1960s-70s - Hemodialysis Selection Committees :

- Public debates about who gets scarce, life-saving treatment → concept of justice in bioethics.

1970s - Karen Ann Quinlan Case :

- Established that competent patients (or surrogates) can refuse even life-sustaining treatment.

1979 - Belmont Report :

- Three principles: Respect for Persons, Beneficence, Justice

1.3 Development : The Birth of Modern Bioethics, Cont.

1979 - Beauchamp & Childress :

- Principles of Biomedical Ethics published — the "Georgetown Mantra" becomes the dominant framework worldwide

1990s - Patient Self-Determination Act (U.S.) :

- Legal requirement to inform patients of their right to make advance directives.

2010s - present CRISPR, AI in Medicine :

- Bioethics expands to cover emerging technologies and algorithmic bias.

Key Takeaway :

- Bioethics did not emerge from abstract philosophy.
- It was **forged in response to horror** — Nazi experiments, Tuskegee, and the quiet daily violations of patient dignity.

Chapter 2 : The Georgetown Mantra

Four Principles of Bioethics



2. The Framework : The Four Principles

Source : Beauchamp & Childress, Principles of Biomedical Ethics (1979).

1. Respect for Autonomy :

Definition :

- Acknowledge the right of competent individuals to make informed, voluntary decisions about their own medical care.
- "My body, my choice — but only if I understand and am not coerced."

Key Question :

- Is the patient making a free and informed decision?

2. Beneficence :

Definition :

- Act in the best interest of the patient; provide benefits and balance risks.

2. The Framework : The Four Principles, Cont.

- "Do good for the patient."

Key Question:

- What treatment offers the best outcome for this person?

3. Non-maleficence :

Definition :

- Avoid causing harm. "First, do no harm" (primum non nocere).
- "Don't make things worse."

Key Question :

- Does this action risk unnecessary harm to the patient?

2. The Framework : The Four Principles, Cont.

4. Justice :

Definition :

- Distribute benefits, risks, and costs fairly; avoid discrimination.
- "Treat similar cases similarly; give each person their due."

Key Question :

- Who gets what, and why?

2.1 The Method : How the Principles Work Together

When analysing a bioethics case, you do not simply "apply" the principles like a checklist. Instead, follow this structured approach:

1. Identify :

- Determine which principles are in conflict within this specific case.

2. Specify :

- Define what each principle demands in this concrete situation.

3. Balance :

- Prioritise one principle over another, providing clear justification for your choice.

4. Justify :

- Support your decision with reasoning that others could accept, not just emotion.

2.1 The Method : How the Principles Work Together, Cont.

Example Conflict

Scenario :

- A patient refuses a blood transfusion (autonomy) but will die without it (beneficence).
- You cannot respect both principles fully.
- Your analysis must explain why you prioritise autonomy over beneficence (or vice versa).
- The justification must be principled, not arbitrary.

Key Insight :

- Principlism doesn't give you the answer — it gives you a **structured way to think through the conflict**.

Chapter 3 : Six Life-and-Death Cases

Applying Principlism to Real-World Dilemmas



Case 1 : Abortion

The Case :

- ❖ A **20-year-old woman is 10 weeks pregnant.**
- ❖ She does not want to continue the pregnancy because she cannot afford a child and is finishing university.
- ❖ The fetus has no detected abnormalities.
- ❖ She requests an abortion.

Principlist Analysis :

1. Autonomy :

- ❖ The pregnant woman has **bodily autonomy**.
- ❖ Forcing her to continue the pregnancy violates her right to make medical decisions about her own body.

Case 1 : Abortion, Cont.

2. Beneficence :

- ❖ What benefits the patient (the woman)?
- ❖ Abortion may benefit her **mental health, education, and financial stability**.
- ❖ Continuing pregnancy benefits the fetus.
- ❖ But is the fetus a "patient" with independent moral standing?

3. Non-maleficence :

- ❖ Abortion causes **fetal death** (harm to fetus if it has moral status).
- ❖ Denying abortion causes **psychological, social, and physical harms** to the woman (pregnancy, childbirth, forced parenting).

Case 1 : Abortion, Cont.

4. Justice :

- ❖ Restricting abortion **disproportionately harms poor women** who cannot travel to where abortion is legal.
- ❖ It also forces women into unwanted motherhood, entrenching gender inequality.

Core Conflict : Autonomy of the woman vs. potential moral status of the fetus

- ❖ Principlism does not resolve when personhood begins.
- ❖ Instead, it clarifies that if you grant full moral status at conception, abortion violates non-maleficence.
- ❖ If you grant it later (e.g., viability), autonomy can prevail earlier.

Case 2 : Surrogacy

The Case :

- A **married couple cannot carry a pregnancy**.
- They hire a surrogate (paid \$50,000) who is artificially inseminated with the husband's sperm.
- After birth, the surrogate changes her mind and wants to keep the baby.
- The genetic father sues for custody.

Principlist Analysis :

1. Autonomy

- The surrogate **voluntarily entered a contract**.
- The intended parents autonomously pursued family-building.
- But did **economic pressure coerce** the surrogate (undermining true autonomy)?

Case 2 : Surrogacy, Cont.

2. Beneficence :

- What produces the **best outcome for the child**?
- Stability, genetic connection, intended parents' preparation vs. the surrogate's gestational bond.

3. Non-maleficence :

- Enforcing the contract **harms the surrogate** (emotional trauma of separation).
- Breaking the contract **harms the intended parents** (loss of promised child).

4. Justice :

- Paid surrogacy raises justice concerns: **wealthy couples exploit poor women's bodies**.
- Does commodifying reproduction degrade women? Or does prohibiting it deny reproductive liberty to both parties?

Case 2 : Surrogacy, Cont.

Core Conflict : Contract autonomy vs. exploitation (justice) vs. child welfare (beneficence)

- Principlism reveals that the case is not simply "keep your promise" — it forces you to examine whether the initial agreement was truly free and fair.

Case 3 : Physician-Assisted Death (PAD)

The Case :

- A **65-year-old man with terminal pancreatic cancer** (6 months expected survival, intractable pain despite opioids) is mentally competent.
- He asks his physician for a prescription of lethal medication so he can end his life at home, on his own terms.

Principlist Analysis :

1. Autonomy :

- **Strongest argument for PAD:** A competent, terminally ill adult should control the timing and manner of death.
- Refusing PAD forces unwanted suffering.

2. Beneficence :

- Ending suffering is a **core goal of medicine**.

Case 3 : Physician-Assisted Death (PAD), Cont.

- If pain cannot be adequately controlled, death can be a benefit (relief from unbearable existence).

3. Non-maleficence :

- The act of prescribing lethal drugs **directly causes death** — a harm.
- Critics argue this violates "do no harm" and changes medicine's identity from healing to killing.

4. Justice :

- If PAD is legal, will **vulnerable groups** (disabled, elderly, poor) be pressured to choose death to avoid being a burden?
- Is access to PAD equitable (not just for the rich who can travel)?

Case 3 : Physician-Assisted Death (PAD), Cont.

Core Conflict : Autonomy & beneficence (ending suffering) vs. **non-maleficence** (not killing) and **justice** (protecting the vulnerable)

- Principlism shows that both sides appeal to valid principles — the debate is about which principles take priority at the end of life.

Case 4 : Euthanasia

The Case :

- A **50-year-old woman is in a persistent vegetative state (PVS)** after a stroke – no consciousness, no possibility of recovery.
- She left no advance directive.
- Her husband says she would never have wanted to live like this.
- He asks the physician to administer a lethal injection (active euthanasia), not just withdraw feeding tubes.

Principlist Analysis :

1. Autonomy :

- The patient **cannot express her wishes**.
- The husband's substituted judgment is ethically relevant but not direct autonomy.
- Without an advance directive, autonomy is silent.

Case 4 : Euthanasia, Cont.

2. Beneficence :

- Is continued existence in PVS a benefit or a harm?
- Most bioethicists say **PVS confers no benefit** (no awareness, no relationships, no pleasure).
- Death may be a benefit.

3. Non-maleficence :

- **Active euthanasia** (lethal injection) is a direct killing.
- **Withdrawing life support** (e.g., feeding tube) is "allowing to die".
- Many laws and ethical codes treat active euthanasia as morally distinct (and prohibited) even if the outcome is the same.

Case 4 : Euthanasia, Cont.

4. Justice :

- Would allowing active euthanasia for PVS patients lead to **slippery slopes** – eventually permitting it for dementia, depression, or disability?
- How do we ensure safeguards?

Core Conflict : Is there a **moral difference between killing and allowing to die?**

- Principlism forces you to defend whether that distinction matters.
- If the outcome (death) and intention (end suffering) are identical, does the method change the ethics?

Case 5 : CRISPR Gene-Edited Babies

The Case :

- A fertility clinic offers to **edit the CCR5 gene in embryos** to make them HIV-resistant.
- The parents are not at risk for HIV – they simply want a "better," disease-resistant child.
- The edit is **heritable (germline)**, affecting all future generations.

Principlist Analysis :

1. Autonomy :

- Parents have **reproductive autonomy** to pursue genetic technologies.
- The child, however, **cannot consent** to having their genome edited.
- Does this violate the child's future autonomy?

Case 5 : CRISPR Gene-Edited Babies, Cont.

2. Beneficence :

- Is there a benefit?
- HIV resistance is a benefit, but the parents are **not at risk**.
- This is **enhancement, not therapy**.
- Does enhancement benefit the child or just satisfy parental preference?

3. Non-maleficence :

- **Major concern:** off-target edits causing cancer or other diseases.
- Unknown multigenerational risks.
- We are **experimenting on future people without their consent**.

Case 5 : CRISPR Gene-Edited Babies, Cont.

4. Justice :

- Will **only the rich afford gene editing**, creating a genetic underclass?
- Is it just to change the human germline without democratic deliberation?

Core Conflict : Parental autonomy vs. **non-maleficence** (unknown risks) vs. **justice** (equitable access).

- Principlism highlights that even if safety is someday proven, justice and the child's right to an open future remain serious objections.

Case 6 : AI Bias in Medical Diagnosis

The Case :

- A large hospital uses an **AI algorithm** to predict which patients have complex medical needs and should be enrolled in a "high-risk care management" programme.
- The algorithm uses **past healthcare costs as a proxy for need**.
- Because the hospital has historically spent less on Black patients (due to systemic barriers to access), the algorithm systematically recommends **fewer Black patients** for the programme – even when they have the same disease burden as white patients.

Principlist Analysis :

1. Autonomy :

- Patients are **not informed** that an algorithm is making risk predictions about them.
- Do they have a right to know and to challenge algorithmic decisions?

Case 6 : AI Bias in Medical Diagnosis, Cont.

2. Beneficence :

- The algorithm was intended to benefit high-need patients.
- Instead, it **harms Black patients by denying them care**.
- A tool that produces systematic disparities fails the beneficence test.

3. Non-maleficence :

- The algorithm **directly causes harm** (denied care) to Black patients.
- Even if the harm was unintentional, non-maleficence requires correcting it.

4. Justice :

- This is a **paradigmatic justice failure**.
- The algorithm perpetuates structural racism under a veneer of objectivity ("the data doesn't lie").
- Justice requires auditing algorithms for disparate impact and correcting bias before deployment.

Case 6 : AI Bias in Medical Diagnosis, Cont.

Core Conflict : Efficiency (using cost as a proxy) vs. **justice** (equal treatment for equal need)

- Principlism reveals that a tool can be technically accurate (cost predicts past spending) but ethically unjust (cost is a biased measure of need).

Chapter 4 : Summary and Reflection

How Principlism Helps (and Its Limits)



Part 4 : Strengths and Limitations of Principlism

Strengths :

- **Shared Vocabulary :**

- Provides a common language for ethical debate across disciplines and cultures.

- **Cross-Cultural :**

- Not tied to one religion or tradition — applicable in diverse context

- **Balanced Framework :**

- Respects both patient rights (autonomy) and physician duties (beneficence).

- **Practical Utility :**

- Useful for clinical decision-making and policy analysis in real-world scenarios.

Part 4 : Strengths and Limitations of Principlism, Cont.

Limitations :

- **Conflict Resolution :**

- Principles can conflict with no algorithm for determining which should prevail.

- **Mechanical Application :**

- Can become "checklist ethics" — superficial box-ticking without deep moral reasoning.

- **No Ranking :**

- Does not rank principles — when autonomy wins, no rule tells you why.

- **Narrow Focus :**

- May miss virtue (character), care (relationships), and narrative (patient story).

Reflection & Discussion : Questions to Consider

Personal Conflict :

- Think of one bioethics issue we discussed. **Which two principles are in conflict for you personally?** How would you justify prioritizing one over the other?

Surprise & Curiosity :

- **What is one thing you learned about bioethics today that surprised you?** What is one question you still have?

"Bioethics is not about finding the 'right' answer — it's about reasoning carefully through the hard questions."

Thank you



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