



Ошский Государственный Университет Международный медицинский факультет.

Кафедра социально- гуманитарных дисциплин.

«Обсуждено»
на засед.каф.СГД,
протокол № 5
«09» декабрь 2024г.
зав.кафедрой, доцент:
Орунбаева Г.Ж. 

«Согласовано»
с председателем метод совета кафедры
доц. к.ф.н. Жороевой А. М. 
протокол № 5
«09» декабрь 2024 г.

Разработка практического занятия

Лексическая тема: «Philosophy of Medical Research»

Дисциплина: Philosophy

Рецензент: Жороевой А. М.

Курс: 1

Семестр: 1

Группа: GM 1, GM 2

Составитель: ст.преп: Ысмаилова Р. А.

Plan of the demonstrative lecture

Subject: Philosophy

Group: 1st year students

Date: 09/12/2024

Lecturer: Associate Professor Ysmailova R.A.

Theme of the lecture: Philosophy of Medical Research

Learning Objectives: by the end of the lecture students will be able to:

- Understand the ethical principles guiding medical research.
- Critically evaluate the role of evidence-based medicine.
- Discuss the limitations of evidence-based medicine and the role of clinical intuition.
- Analyze ethical dilemmas in clinical trials and research.

Visual Aids: slides, video to illustrate complex concepts and enhance understanding.

Ethical Dilemmas: real-life ethical dilemmas in medical research and students discuss potential solutions.

Critical Thinking: students critically evaluate the evidence and question assumptions.

Outline

- I. Introduction (5 minutes)**
- II. Revision of the previous theme (10 minutes)**
- III. Video (5 minutes)**
- IV. Ethical Considerations in Clinical Trials and Research (25 minutes)**
 - Ethical Principles:**
 - Respect for persons (autonomy, informed consent)
 - Beneficence (maximizing benefits, minimizing harm)
 - Justice (fair distribution of risks and benefits)
 - Historical Context:**
 - Nuremberg Code
 - Declaration of Helsinki
 - Contemporary Challenges:**
 - Vulnerable populations
 - Placebo controls
 - Data privacy and security
- V. The Role of Evidence-Based Medicine vs. Clinical Intuition (30 minutes)**
 - Evidence-Based Medicine:**
 - Definition and key components (clinical expertise, patient values, best available evidence)
 - Strengths and limitations
 - Clinical Intuition:**
 - Definition and role in decision-making
 - Potential biases and pitfalls
 - The Balance Between Evidence and Intuition:**
 - The importance of integrating both approaches
 - The role of critical thinking and reflective practice
- VI. Conclusion (10 minutes)**
- VII. Marking/Task (5min)**

The scheme of the lecture

I. Introduction to the lecture/Orgmoment

II. Revision

1. What is health? Is it simply the absence of disease, or is it a more holistic concept that includes mental, social, and spiritual well-being?
2. How do we define well-being? Is it a subjective or objective state? What role do happiness, satisfaction, and meaning play in well-being?
3. What is the relationship between mind and body? How do psychological factors influence physical health, and vice versa?
4. What is the value of health? Is health an intrinsic good or merely a means to other ends?

- **What is health?** This is a complex question. The traditional view sees health as the **absence of disease**. However, a more **holistic** perspective considers health to encompass **physical, mental, social, and spiritual well-being**.

- **Defining well-being:** Well-being can be **subjective** (influenced by personal experiences and values). It includes **happiness, satisfaction**, and a sense of **meaning** in life. It's not just the absence of negative emotions.

- **Mind-body connection:** There's a strong link. **Psychological factors** like stress and anxiety can affect **physical health** (e.g., weaken immune system). Conversely, **physical health** issues can impact **mental well-being** (e.g., chronic illness leading to depression).

- **Value of health:** Health is arguably an **intrinsic good**. It allows us to pursue other aspects of life (work, relationships). However, it can also be seen as a **means to an end** (e.g., good health enables us to pursue our passions).

III. Video about Nuremberg code

Examples of significant ethical breaches in medical research:

1. **The Tuskegee Syphilis Study:** This infamous study, conducted by the U.S. Public Health Service from 1932 to 1972, involved withholding treatment for syphilis from hundreds of African American men in Alabama. The researchers deceived the participants and denied them access to penicillin, even after it became the standard treatment for syphilis.

Instead of treating the men with penicillin, which became available in the 1940s, researchers withheld treatment to study the natural progression of the disease. This study was a gross violation of ethical principles, as participants were deceived, denied treatment, and subjected to unnecessary harm. The Tuskegee Syphilis Study led to significant reforms in medical research ethics and emphasized the importance of informed consent, beneficence, and justice.

2. **The Radiation Experiments:** During the Cold War, the U.S. government conducted numerous radiation experiments on unsuspecting human subjects, including soldiers, prisoners, and mentally ill patients. These experiments often involved exposing individuals to harmful levels of radiation without their informed consent.

3. **The Thalidomide Tragedy:** Thalidomide was a drug prescribed to pregnant women in the 1950s and 1960s to alleviate morning sickness. However, it was later discovered to cause severe birth defects. The tragedy led to stricter regulations for drug testing and highlighted the importance of rigorous safety protocols.

The philosophy of medical research is a field that delves into the ethical, epistemological, and methodological underpinnings of scientific inquiry in healthcare. It provides a framework for understanding the values, principles, and limitations that guide medical research.² This philosophy is crucial for ensuring that research is conducted ethically, produces reliable and valid results, and ultimately benefits patients.

By examining the philosophical foundations of medical research, we can address questions such as:

- What constitutes ethical research?
- How can we balance the pursuit of knowledge with the protection of human subjects?
- What is the role of evidence-based medicine in clinical decision-making?
- How can we account for the complexities of human experience and individual variation in research?

The philosophy of medical research serves as a compass, guiding researchers and clinicians towards responsible and effective practices. It helps to ensure that medical advancements are grounded in sound ethical principles and rigorous scientific methods.

IV. Ethical Considerations in Clinical Trials and Research

Ethical Principles

- **Respect for Persons:** This principle emphasizes the autonomy of individuals and their right to self-determination. In the context of medical research, this means obtaining informed consent from participants, ensuring they understand the risks and benefits of the study, and protecting their privacy.
- **Beneficence:** This principle requires researchers to maximize the potential benefits of a study while minimizing harm. It involves carefully weighing the risks and benefits of research and taking steps to protect participants from harm.
- **Justice:** This principle dictates that the burdens and benefits of research should be fairly distributed across different populations. It is important to avoid exploiting vulnerable populations or excluding certain groups from the potential benefits of research.

By adhering to these core ethical principles, researchers can conduct responsible and ethical medical research that benefits society while protecting the rights and well-being of participants.

Historical Context

- **Nuremberg Code:** Developed in response to the atrocities committed by Nazi doctors during World War II, the Nuremberg Code outlines ethical principles for human experimentation, including the requirement for informed consent, the avoidance of unnecessary suffering, and the justification of research.
- **Declaration of Helsinki:** Adopted by the World Medical Association, the Declaration of Helsinki provides ethical guidelines for medical research involving human subjects. It emphasizes the importance of scientific soundness, independent review, informed consent, and the protection of vulnerable populations.

Contemporary Challenges

- **Vulnerable Populations:** Researchers must be particularly cautious when involving vulnerable populations, such as children, the elderly, and individuals with cognitive impairments. It is essential to obtain appropriate consent, minimize risks, and ensure that the benefits of the research outweigh the potential harms.
- **Placebo Controls:** The use of placebo controls in clinical trials can raise ethical concerns, particularly when effective treatments are available. Researchers must carefully consider the ethical implications of withholding treatment from participants, especially in life-threatening conditions.
- **Data Privacy and Security:** With the increasing reliance on electronic health records and digital data, protecting the privacy and security of research participants has become a major challenge. Researchers must implement robust measures to safeguard sensitive information and comply with data protection regulations.

V. The Role of Evidence-Based Medicine vs. Clinical Intuition

Evidence-Based Medicine

Definition: Evidence-based medicine (EBM) is a clinical approach to decision-making that integrates the best available research evidence with clinical expertise and patient values.

Key Components:

1. **Clinical Expertise:** The clinician's knowledge, skills, and experience.
2. **Patient Values:** The patient's preferences, concerns, and expectations.
3. **Best Available Evidence:** The most current, valid, and relevant research evidence.

Strengths of EBM:

- **Reduces bias:** By relying on systematic reviews and meta-analyses, EBM can minimize bias in decision-making.
- **Improves patient outcomes:** By providing evidence-based guidelines, EBM can lead to better patient outcomes.
- **Promotes accountability:** EBM promotes transparency and accountability in clinical practice.

Limitations of EBM:

- **Lack of evidence for certain conditions:** Not all clinical situations have high-quality evidence.
- **Overreliance on guidelines:** Blind adherence to guidelines can lead to a one-size-fits-all approach.
- **Time constraints:** Clinicians may not always have the time to search for and critically appraise the best available evidence.

Clinical Intuition

Definition: Clinical intuition is the ability to make clinical judgments based on experience, pattern recognition, and tacit knowledge.

Role in Decision-Making:

- **Rapid decision-making:** Clinical intuition can be helpful in time-sensitive situations.
- **Complex cases:** It can be useful in complex cases where evidence-based guidelines may not be directly applicable.

Potential Biases and Pitfalls:

- **Cognitive biases:** Confirmation bias, anchoring bias, and hindsight bias can distort clinical judgment.
- **Overreliance on experience:** Relying too heavily on past experiences can lead to suboptimal decisions.

The Balance Between Evidence and Intuition

To provide optimal patient care, clinicians must strike a balance between evidence-based medicine and clinical intuition. By integrating both approaches, clinicians can make informed decisions that are both evidence-based and patient-centered.

Key Considerations:

- **Critical Thinking:** Clinicians should critically appraise the evidence and consider the limitations of both EBM and clinical intuition.
- **Reflective Practice:** Regularly reflecting on clinical decisions can help identify areas for improvement and enhance future practice.
- **Patient-Centered Care:** Prioritizing patient values and preferences is essential in all clinical encounters.

By understanding the strengths and limitations of both evidence-based medicine and clinical intuition, clinicians can make informed decisions that promote patient well-being.

VI. Conclusion

Ethical Considerations: We discussed the importance of ethical principles in medical research, including respect for persons, beneficence, and justice. We also explored historical and contemporary challenges, such as vulnerable populations, placebo controls, and data privacy.

Evidence-Based Medicine: We delved into the concept of evidence-based medicine and its strengths and limitations. We emphasized the importance of integrating clinical expertise, patient values, and the best available evidence.

Clinical Intuition: We examined the role of clinical intuition in decision-making and discussed its potential biases and pitfalls. We highlighted the need to balance evidence-based medicine with clinical intuition to provide optimal patient care.

Final Thoughts

The philosophy of medical research is essential for ensuring that medical research is conducted ethically, produces reliable results, and ultimately benefits patients. By understanding the ethical principles, the strengths and limitations of evidence-based medicine, and the role of clinical intuition, we can promote responsible and effective healthcare practices. It is crucial to foster a culture of critical thinking, continuous learning, and ethical awareness among healthcare professionals.

Q&A Session

Now, I'd like to open the floor for questions and discussion. Please feel free to ask any questions you may have.

VII. Marking