Medical Ethics

But first ... sign ups for the mock patient interview next week!

- Counts as one elective
- Will be at the start of homeroom next week on March 3rd
- Up to 5 students can perform a patient interview. If there are more than 5 volunteers, preference will be given to those students who still need elective credit to obtain honors.
- Depending on how many students volunteer, your preceptor may change the start time of homeroom next week to accommodate the number of student interviews. Look out for an email from your preceptors about the start time on March 3rd!
- Any volunteers?

And information about the final quiz...

- Will open 3/3 at 8pm and close 3/10 at 8pm
 - No exceptions or late submissions will be accepted
- Questions are based on the homeroom presentations
 - Presentations can be found here:
 http://njms.rutgers.edu/education/Mini-Medical-School/mm_schedule.cfm
- The quiz is closed notes (you cannot have any study materials open while taking it)
- The quiz must be completed in one sitting
- The quiz is not timed
- The quiz is all multiple choice questions

What do we mean by "ethics"?

"Ethics" is defined as...

- the discipline dealing with what is good and bad and with moral duty and obligation
- 2. a theory or system of moral values

The Four Pillars of Medical Ethics

What do you think each "pillar" means?

- Autonomy
- Beneficence
- Non-maleficence
- Justice



The Four Pillars of Medical Ethics (cont.)

Autonomy

• Honoring the patient's right to make their own decision

Beneficence

• Providing treatment with the intent of doing good for the patient

Nonmaleficence

• To do no harm to the patient

Justice

• Fair and equitable distribution of health resources

Why do you think ethics is important in medicine?

Possible Reasons why Medical Ethics is Important

- What the doctor thinks is the best course of action may not be what the patient wants to do. This creates an ethical dilemma.
- When is it ok to perform clinical medical experiments on people? On children?
- Is it ok to withdraw life sustaining support from someone who shows no hope of recovering?

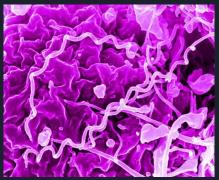
History of Medical Ethics - Nuremberg Trials

- In 1946, Nazi doctors, among other Nazi officials were tried for war crimes committed during World War II
- "Experiments" these doctors were tried for included:
 - Subjecting victims to freezing conditions to discover ways to prevent and treat hypothermia.
 Many victims died in the process
 - Administering bacterial infections to victims to determine the effects of sulfonamide, an antibiotic
 - Observing the effects of mustard gas on humans, and to see how to treat it
- What ethical principles (autonomy, beneficence, non-maleficence, and/or justice)
 were violated?

History of Medical Ethics - Tuskegee Syphilis Study

- Syphilis is a bacterial infection usually spread by sexual contact. Without treatment, syphilis can severely damage your heart, brain or other organs, and can be life-threatening.
- The study started in 1932 and involved 600 black men 399 with syphilis, 201 who did not have the disease.
- The study was intended to investigate the symptoms and progression of syphilis
- The study was conducted without the benefit of patients' informed consent.





History of Medical Ethics - Tuskegee Syphilis Study

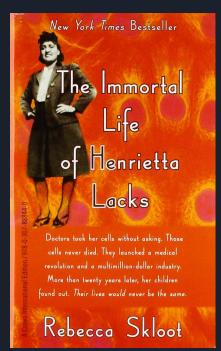
- Researchers told the men they were being treated for "bad blood" but they did not receive the proper treatment needed to cure their illness
- In exchange for taking part in the study, the men received free medical exams, free meals, and burial insurance
- Although originally projected to last 6 months, the study actually went on for 40 years
- In 1945, penicillin was accepted as the choice of treatment for syphilis, yet the men were not given penicillin and the study did not end until 1972
- What ethical principles (autonomy, beneficence, non-maleficence and/or justice) were violated?



The movie, Miss Evers' Boys, discusses the study

History of Medical Ethics - Henrietta Lacks

- In 1951, Henrietta Lacks visited Johns Hopkins Hospital with symptoms of vaginal bleeding
- Upon examination, there was a large, malignant tumor on her cervix
- A sample of her cancer cells retrieved during a biopsy were sent to Dr. George Gey's tissue lab
- He observed that Mrs. Lacks' cells were unlike any of the others he had ever seen: where other cells would die, Mrs. Lacks' cells doubled every 20 to 24 hours
- These cells are nicknamed "HeLa" cells. They can still be found throughout many labs in the world and are used to study the effects of toxins, drugs, hormones and viruses on the growth of cancer cells, yet Mrs. Lacks' family never got compensated for the discovery
- What ethical principles (autonomy, beneficence, non-maleficence, and/or justice) were violated?



These ethical violations along with other cases resulted in establishing medical ethics committees, review boards, and patient confidentiality laws

Declaration of Helsinki

- Established in 1964, the declaration provides recommendations guiding medical doctors in biomedical research involving human subjects and governs international research ethics
- The principles include:
 - Research with humans should be based on the results from laboratory and animal experimentation
 - Research protocols should be reviewed by an independent committee prior to initiation
 - Informed consent from research participants is necessary
 - Research should be conducted by medically/scientifically qualified individuals
 - Risks should not exceed benefits

National Research Act

- Passed in 1974 as a response to the Tuskegee Syphilis Experiment
- Created a commission that drafted the Belmont Report which established three ethical principles:
 - Respect for Persons
 - Individuals should be treated as free thinking people and are capable of making their own informed decisions
 - Persons with reduced free thinking abilities are entitled to protection
 - Beneficence
 - Justice
- Also established the Institutional Review Board (IRB)

Institutional Review Board (IRB)

- An Institutional Review Board (IRB) is a committee of people who have training in scientific areas, non-scientific areas, and members of the community who may represent people who would participate as subjects in research studies
 - o As NJMS medical students, we can apply and sit on the IRB committee at our school
- An IRB provides an independent review of research studies that propose to use human subjects in answering a research question
- The IRB is concerned with the research being conducted in an ethical manner, with protecting the rights and welfare of the human subjects
- Why do you think it is important to have a diverse group of individuals on an IRB?

HIPAA

- Health Insurance Portability and Accountability Act of 1996 (HIPAA)
- It established national standards to protect sensitive patient health information from being disclosed without the patient's consent or knowledge
- Medical students take the Hippocratic Oath which states:
 - "Whatever I see or hear in the lives of my patients, whether in connection with my professional practice or not, which ought not to be spoken of outside, I will keep secret, as considering all such things to be private."

CASE #1
"DESIGN YOUR OWN BABY"

CRISPR/Cas9

- 2020 Nobel prize in Chemistry to Dr.
 Emmanuelle Charpentier and Dr. Jennifer A.
 Doudna
- CRISPR/Cas9 is a method of gene editing (altering DNA) which has therapeutic potential for treating genetic diseases
- The movie, "Gattaca", is about a society where children are conceived through genetic selection to ensure they possess the best hereditary traits of their parents

Chinese scientist who produced genetically altered babies sentenced to 3 years in jail

By Dennis Normile Dec. 30, 2019, 8:15 AM



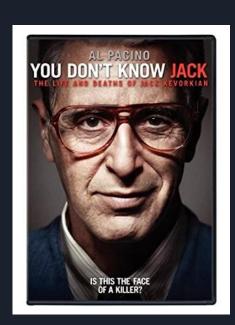


- In the future, under what circumstances should we use genomic editing?
 - For example, should we alter debilitating genetic conditions i.e. cystic fibrosis or sickle cell disease? Should we be able to change a baby's eye color?
- Should people with more money be able to create their ideal baby?
- What should be the limitations, if any?
- Does this violate any ethical principles (autonomy, beneficence, non-maleficence, and/or justice)?

CASE #2
"DR. DEATH"

Physician Assisted Dying/Suicide

- The American Academy of Hospice and Palliative medicine defines Physician-Assisted Dying as "a physician providing, at the patient's request, a prescription for a lethal dose of medication that the patient can self-administer by ingestion, with the explicit intention of ending life"
- Jack Kevorkian was a pathologist who was a proponent of euthanasia and performed physician assisted dying/suicide on patients, eventually leading to his arrest
- Certain states, like New Jersey, have Death with Dignity laws which allow a patient to undergo physician assisted dying/suicide, but require robust screening processes



The movie, "You Don't Know Jack", discusses Dr. Kevorkian's life

- Explain how physician assisted suicide relates to the ethical pillar of non-maleficence? How about autonomy? Beneficence?
- What regulations do you think there needs to be before allowing patients to partake in physician assisted death/suicide, if any?
- If a patient is considered "brain-dead", could family members make this type of decision?

CASE #3 "Tarasoff v. Regents of the University of California"

Patient Confidentiality

- Prosenjit Poddar was a graduate student at the University of California, Berkeley in 1967 who met Tatiana Tarasoff
- Tarasoff kissed Poddar on New Year's Eve and he interpreted the act to be a serious relationship; that view was not shared by Tarasoff
- Poddar underwent a severe emotional crisis and went to see Dr.
 Lawrence Moore, a psychologist
- Poddar disclosed to Dr. Moore that he was going to kill
 Tarasoff, which Dr. Moore reported to campus police
- On October 27, 1969, Poddar murdered Tarasoff
- HIPAA laws were not established until 1996 but they are in support of protecting patient information



- At what point should HIPAA laws be violated, if any?
- What should healthcare workers do in this scenario?
- Is there another situation where you would report something your patient said?
- What if you found out your patient had a genetic disease that put their children at risk for developing the same genetic disease.
 However, the patient wants you to keep his/her diagnosis a secret.
 Should you tell the children? What ethical principles (autonomy, beneficence, non-maleficence, and/or justice) are in conflict here?

QUESTIONS?

Sources

- <a href="https://static1.squarespace.com/static/593f99e41e5b6cb3076ce60a/59433b006a4963db87c08bb8/596e9ba386e6c001dbceb41f/1500421492383/pillars_t https://static1.squarespace.com/static/593f99e41e5b6cb3076ce60a/59433b006a4963db87c08bb8/596e9ba386e6c001dbceb41f/1500421492383/pillars_t https://static1.squarespace.com/static/fillars_t https://static/fillars_t https://static/fillars_t https://static/fillars_t https://static/fillars_t https://static/fillars_t https://static/fillars_t https://static/fillars_t https://static/fi
- https://vtethicsnetwork.org/medical-ethics/overview
- https://www.merriam-webster.com/dictionary/ethic
- https://www.nejm.org/doi/full/10.1056/NEJM199005173222006
- https://www.thenewatlantis.com/publications/the-legacy-of-nazi-medicine
- https://link.springer.com/chapter/10.1007/978-3-319-51664-6_13
- https://www.mayoclinic.org/diseases-conditions/syphilis/symptoms-causes/syc-20351756
- https://www.cdc.gov/tuskegee/timeline.htm
- https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcOcE6535rtbKdLMKZseNDmLbV-F9Yfj1h7j-wPxD5MI4FkICio0
- https://upload.medbullets.com/topic/120217/images/secondary_syphilis.jpg
- https://www.niaid.nih.gov/sites/default/files/styles/image_style_og/public/syphilis-hero.jpg?itok=IPJGVoCs
- https://www.hopkinsmedicine.org/henriettalacks/
- https://images-na.ssl-images-amazon.com/images/I/71YyiW5bLzL.jpg
- https://hrpo.wustl.edu/participants/institutional-review-board/
- https://www.unlv.edu/research/ORI-HSR/history-ethics
- https://www.sciencemag.org/news/2019/12/chinese-scientist-who-produced-genetically-altered-babies-sentenced-3-years-jail
- https://static.scientificamerican.com/sciam/cache/file/74D00FB9-193B-47E7-81BFA2970B88EE62_source.jpg
- https://en.wikipedia.org/wiki/Gattaca
- http://aahpm.org/positions/pad
- https://images-na.ssl-images-amazon.com/images/I/51bm9GsiwbL. SY445 .jpg
- https://www.deathwithdignity.org/learn/death-with-dignity-acts/
- https://www.nlm.nih.gov/hmd/greek/greek oath.html
- https://miro.medium.com/focal/1200/900/50/58/1*0t3A_05GjYPSGwxavjDekO.jpeg
- https://en.wikipedia.org/wiki/Tarasoff v. Regents of the University of California