A PROPOSAL FOR A NEW HUMAN PHYSIOLOGY REQUIREMENT: A CLASS ON MEDICAL EQUITY AND ETHICS

by

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A THESIS

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A Class on Medical Equity and Ethics

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This thesis proposes a mandatory class in Medical Equity and Ethics for Human Physiology majors at the University of Oregon, the majority of whom pursue a career in healthcare. Healthcare professionals need to understand not only the details of how the body functions, but also the people whose bodies and minds are placed in our care. We will not solely treat heart disease, pulled muscles, or gum disease; rather we will treat people with those conditions.

Advances in data collection and analysis have highlighted healthcare inequalities at the same time advances in health care continue to call into question basic tenants of what is life and what is death. There is a spotlight on healthcare ethics and inequities that we, as future medical providers, have a duty to acknowledge - not just for the benefit of our patients but for the system itself. Given the many health inequalities that exist in healthcare, it is imperative to educate potential healthcare workers on issues of social equity and medical ethics so that healthcare experience is improved both individually and systemically.

UO currently does have classes on medical ethics and racial discrimination, but these are not classes that are explicitly required for Human Physiology (HPHY) students nor are they tailored to the situations and circumstances that HPHY students are likely to encounter in their

future careers. This thesis describes a proposed new HPHY requirement for a class covering topics related to social equity and ethics in the healthcare field. I have identified three major topics: social determinants of health, patient centered care, and medical ethics. Social determinants of health bring to light disparities in mortality and morbidity experienced by various social and socioeconomic groups. Patient centered care defines a respectful and compassionate partnership between the care provider and the patient and their support system that considers culture and values while promoting shared decision making to provide safe and effective holistic care. Medical Ethics introduces the principles and values of healthcare that guide ethical decision making and gives students the opportunity to apply those principles to medical dilemmas in peer discussions.

For each of these topics, I propose required and suggested readings and summarize the pertinent information, identify key points, advance topics for discussion, assign dilemma case studies, and identify learning objectives to ensure understanding of the fundamental ideas. This proposed new requirement will ensure all HPHY students are given early exposure to equity and ethical issues and provided opportunities to analyze difficult situations and to discuss relevant values and solutions in a classroom setting. Ideally those aspiring to healthcare professions are interested in both the science of health and the care of patients. As it stands, the HPHY major educates students in the science of the human body. This mandated class concentrating on issues of medical equity, patient centered care, and medical ethics, will complement the current curriculum and promote holistic medicine which cares for the body, mind, and soul of each patient and their communities.

Acknowledgements

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Many thanks to my sister and friends who participated in discussions and debates on all matters of ethical subjects which ultimately sparked my interest in this thesis topic.

Last, but far from least, I would like to express my deep gratitude to my parents for their constant support, guidance, and love. They were my first teachers and I continually learn from their example.

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Introduction

With required classes in Scientific Investigation, Medical Terminology, Anatomy and Physiology, the Human Physiology (HPHY) major at University of Oregon provides students who are aspiring doctors, physical therapists, dentists, as well as other diagnostic, therapeutic, and preventive medical professionals with in-depth knowledge of the science of the human body. For a career in medicine, this is a great start, but the field of healthcare involves so much more. Healthcare issues go way beyond understanding how the body works and with the majority of HPHY students entering the healthcare field, students should be educated not only on the 'health' side but on the 'care' side as well. Medical professionals must not only be knowledgeable about what is going on in the body of a patient, they must be able to understand the unique circumstances of each patient in their care in order to provide the highest level of service. Beyond diagnosis, the health care professional must be able to educate patients on their conditions in a respectful and socially sensitive manner, advise patients on options which may be ethically complex, and accept guidance from patients on how to proceed even when it contradicts their own opinions.

In order to better prepare University of Oregon HPHY students to confront the many social equity and ethical issues and challenges that they will likely face in their healthcare related careers, I am proposing a new class requirement in the HPHY major to address these concerns. This four-credit class, taken in Senior year, will introduce social equity issues and topics in medical ethics in order to provide students the opportunity to research and discuss these issues with the classmates we have come to know. I believe a course on social equity and medical ethics at the *undergraduate* level is imperative to help address inequities in healthcare. The

sooner students are aware of these issues, the more they can consider them in their continuing studies. Additionally, I think it will be beneficial to have group discussions before we are separated into professional schools. Already I have heard students aiming for medical school disparaging other medical pursuits that they view as less worthwhile. I think discussions that include students going into various healthcare positions are likely to bring different points of view and enlighten students on the teamwork and cooperation necessary to provide the best patient care. Senior year is an ideal time to have this class because each of us will have a more realistic view of our professional aspirations and we have gotten to know each other and are likely to respectfully listen to one another.

My personal reasons for choosing the topic of social equity and medical ethics stems from a long fascination with concepts of fairness and right and wrong. Like many people I watched in horror as COVID-19 killed so many people and news reports emerged on the disproportionate number of deaths in poor and/or BIPOC communities. Naively, I had believed that all patients would be given the best possible care available in this country. The idea that ventilators would be rationed and decisions as to who was most worthy was stunning. It was as if we were living a dystopian reality. In my future career in healthcare, I want to be as informed as possible on ethical and equity issues so that I can be confident in providing each patient with the best possible care and in advancing overall equity in healthcare. I am fascinated by philosophical and ethical questions and have often kept my roommates up until the early morning hours pondering and discussing such conundrums. My views have been expanded by these extemporaneous discourses and I would welcome the opportunity to research and study these topics more formally in the classroom.

The University of Oregon does currently offer a wide range of sociology, philosophy, anthropology, and political science classes relating to equity and social inequality. I have taken the "Global Wellbeing" class through the Global Studies department, the "Health Equity" class offered for a term by the Clark Honors College, the "Social Inequality" class offered by the Sociology Department, and most recently the philosophy department's class on "Medical Ethics". There also exists an Indigenous, Ethnic, and Race Studies program within the university. While the University provides options for students interested in learning about equity, these classes are only taken by students who already have an interest in social inequities, and they are not tailored to the situations and circumstances that HPHY students are likely to encounter in their future careers. Additionally, the HPHY department requirements for an undergraduate degree do not include any of these relevant classes. While some HPHY professors do occasionally mention some healthcare inequalities, I believe that centralized and concerted effort by the department is warranted given the gravity and pervasiveness of the inequalities and the likelihood that students will encounter these scenarios in their careers.

Many other large state universities do not offer the human physiology or a physiology major and instead simply offer Biology as the pre-healthcare major. Due to this inconsistency in naming pre-health type majors, it is difficult to properly assess the curriculum of the major on a national scale. There is currently no accrediting body for undergraduate human physiology programs[1]. Some efforts have been made to facilitate communication between physiology departments, but these appear to have been abandoned during COVID. [2] Of the few physiology programs that I was able to find offered at other large universities, two offered a class that in some way discussed the healthcare profession. The University of Minnesota and the University

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[1] Chadwick, 2020
[2] PMIG, n.d.

of Arizona both offer a physiology undergraduate major, and like our program they do not include any health equity or medical ethics classes.[3] The University of Iowa Human Physiology undergraduate program includes Medical Sociology on a list of classes that can be taken for major credit, but it is not a required class for all students in the major, nor is it designed specifically for pre-health students.[4] Boston University is home to the sole Human Physiology department I was able to find that requires all students to take a 2 credit "Introduction to Health Professions" course. The course description includes topics such as: Introduction to the health care system, the social impact of health and disability, and the allocation of healthcare resources.[5]

Given that there are few physiology programs currently requiring students to take a health equity and ethics class, the University of Oregon would be leading the way for physiology programs nationwide. UO has a commitment to social awareness and the HPHY department could highlight the importance for healthcare providers of all kinds to understand social determinants of health, cultural competency, unconscious bias, and other factors that affect the quality of healthcare. The importance of these topics is emphasized by the fact that nearly all advanced degrees and many continuing education programs in health-related fields include some type of medical equity and ethics in their curricula.

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[3] University of Minnesota, n.d.; University of Arizona, n.d.
[4] University of Iowa, n.d.
[5] Boston University, n.d.a; Boston University, n.d.b

Class Content

The Institute of Medicine, the health arm of the National Academy of Sciences, has identified six widely adopted goals for improving the quality of healthcare: avoiding injuries to patients; providing care based on scientific knowledge; providing respectful and responsive care that ensures that patient values guide clinical decisions; reducing waits for both recipients and providers of care; avoiding waste; ensuring that the quality of care does not vary because of characteristics such as gender, ethnicity, socioeconomic status, or geographic location.[6]

Figure 1[6]

Goal	Description
1. Safe care	Avoiding injuries to patients
2. Effective care	Providing care based on scientific knowledge
3. Patient-centered care	Providing respectful and responsive care that ensures that patient values guide clinical decisions
4. Timely care	Reducing waits for both recipients and providers of care
5. Efficient care	Avoiding waste
6. Equitable care	Ensuring that the quality of care does not vary because of characteristics such as gender, ethnicity, socioeconomic status, or geographic location.

The first two items, safe and effective care, are the cornerstones of healthcare. The fourth and fifth items, timely and efficient care, are largely process improvements. The third and sixth

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[6] Hughes, 2008

items, patient-centered care and equitable care, will be two of three main themes addressed by the newly proposed class. The third theme will be an introduction to medical ethics.

Originally, I thought I would create a syllabus for this proposed class as that is what I am used to seeing as a student. With guidance from my advisors however, I am instead outlining themes, proposing sources, defining learning objectives, and suggesting class assignments to be included in the class. This gives individual professors the opportunity to make the class their own.

THEME 1: Social Determinants of Health

"Penicillin may be indicated to cure pneumonia, but it alone will not stop the roof from leaking" -Dr. Roy Brown

Understanding how social determinants of health impact populations differently is paramount to understanding health equity and inequity. Equitable care can only be obtained when social considerations are taken into account. Equity is different from equality; it is meeting someone where they are at and providing needed assistance to achieve the desired goal. The popular meme image in Figure 2 depicts equality and equity. In the picture on the left, some people are unable to see over the fence because the ground is lower in some regions and the fence is higher. In the picture on the right however, each person that needs assistance is given what is required to achieve the goal of seeing over the fence. One person gets one box while another gets three. It is not equal, but considering the goal, it is equitable. Understanding social equity is a key building block in achieving healthcare equity.
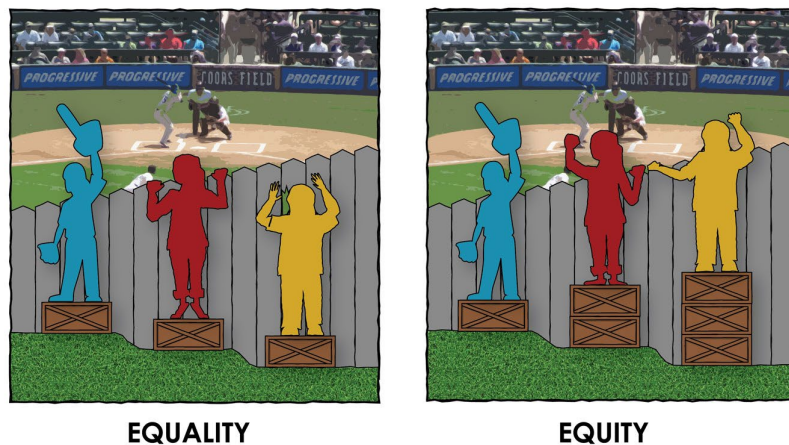

EQUALITY   EQUITY

Figure 2: Equality versus Equity Image[7]

Equitable care is defined by the World Health Organization as care that does not vary in quality based on ethnicity, gender, sexuality, geographic location, or socio-economic status.[8] Quality equitable care should be the goal of all healthcare professionals, and yet there are countless examples of health disparities that impact different social and socioeconomic groups. The most obstinate of these disparities are ones impacting Black and indigenous people of color (BIPOC). Black women in the United States have 15 times the HIV rate compared to white women, Black men are 6 times more likely to die from HIV than white men, and Black women are 15.3 times more likely to die from HIV than white women.[9] Black women are 3-4 times more likely to die in childbirth than white women.[10] Puerto Ricans have a greater prevalence of and mortality from chronic conditions such as diabetes, asthma, and cardiovascular disease compared to the general population of the United States.[11] Men are almost four times more likely than women to commit suicide .[12] LGBTQ youth are more likely to deal with mental health issues and substance abuse issues compared to their heterosexual peers .[13] Analysis of COVID-19 data indicates that the higher the level of poverty in a county, the greater the chance of infection and death regardless of race distribution. One study found that death rates in poor neighborhoods were more than two and a half times higher than in wealthier neighborhoods making zip code a primary determining factor of how you might fare from the disease.[14] Looking

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[7] Kuttner, 2016
[8] World Health Organization, n.d.
[9] Office of Minority Health, 2023
[10] Lubell, 2022
[11] Lafarga Previdi & Vélez Vega, 2020
[12] Center for Disease Control and Prevention, 2013
[13] Makadon, Mayar, Potter, & Goldhammer, 2008
[14] Cabin, 2021

at Medicaid and uninsured patients to assess socio-economic disparities, a 10-year study analyzed an estimated 78 million visits to the Emergency Department in which patients presented with a complaint of chest pain. Medicaid patients and uninsured patients were less likely to be triaged emergently and were less likely to have an electrocardiogram or to have cardiac enzymes or a cardiac monitor ordered. These initial triage disparities may affect later clinical care and contribute to poor outcomes. Additionally, looking at trends, there was no improvement in the level of treatment over those same years.[15]

These health inequities do not have a biological basis but are instead the result of the social determinants of health which impact health outcomes. Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.[16] These conditions include things such as access to healthcare, access to education, employment opportunities, housing, available transportation, social support networks, exposure to racism or other types of discrimination, bullying, and so much more. These social determinants influence many facets of an individual's life, including their health and health treatment outcomes.

From the aforementioned examples it can be clearly seen that disparities in healthcare persist and indicate that equitable care is yet to be achieved. Although the root causes for these disparities are complex, that does not mean there is nothing to be done. According to Betancourt et al.: "There exists a well-developed set of evidence-based approaches to address them [inequities]. As we move ahead, it is critical to assure that our health-care system is culturally competent and has the capacity to deliver high-quality care for all, while eliminating disparities

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[15] López, Wilper, Cervantes, Betancourt, & Green, 2010
[16] Office of Disease Prevention and Health Promotion, n.d.

and assuring equity."[17] Primary among proposed solutions to health inequities is to improve cultural competence of health-care providers through education on the issues. In order to address disparities and achieve equity it is important for healthcare providers of all kinds to understand social determinants of health and how they interact in various communities, and to improve their cultural humility.

Proposed Sources

The following list is a preliminary selection of books, articles, podcasts, documents that are relevant to the topic of Equity and Social Determinants of Health.

- "The State of Health Disparities in the United States" NIH article

  https://www.ncbi.nlm.nih.gov/books/NBK425844/

  - Summary: An excerpt from a textbook about healthy communities, this reading on health disparities in the United States provides examples and details about health disparities that persist in the United States today among different social populations. In addition to chronicling the existence of many different types of health disparities among many different populations including BIPOC, LGBTQ individuals, veterans, and those of low socioeconomic status, the reading provides proposed solutions to some of these issues.

  - Relevance: This article would be a helpful article to read for students who are new to the topic of health disparities and health equity because it provides so many specific examples which would help students to understand how serious and how widespread the issues of health inequalities are in our current healthcare system.

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[17]Betancourt, Corbett, & Bondaryk, 2014

- ○ Discussion: The article sometimes discusses proposed solutions to some of the health disparities that it mentions. It would be interesting for students to spend time discussing the solutions with their classmates, as well as brainstorming more ways to combat these issues. It is also important to talk about health disparities that impact lots of different types of populations and this article is a broad overview of health disparities in the United States in general as opposed to a deep dive into any specific population.
- CDC Guidelines for helping physicians understand health equities.

  https://www.cdc.gov/nccdphp/dch/pdf/healthequityguide.pdf

  - ○ Summary: This guide for healthcare professionals outlines ways that health disparities can be combated through policy changes, system changes, and environmental improvement strategies. Specifically, the guide outlines things that healthcare providers can do to assist in these policy changes including engaging the community and identifying community needs, developing community partnerships, and evaluating evidence-based interventions. The resource has four major sections: 1. Incorporating Health Equity into the foundational skills of Public Health, 2. Maximizing tobacco-free living strategies, 3. Maximizing healthy food and beverage strategies, 4. Maximizing active living to advance health equity.
  - ○ Relevance: This guide is designed specifically for healthcare professionals and thus provides a perspective that many other readings on health equities do not, and a perspective that is important for HPHY students to understand. The article

does not list improved cultural competence as the main fix to health inequities and instead focuses on policy-based changes to improve health for all people.

- ○ Discussion: A guide such as this one is important to read in a class like this because it discusses how communities must work together at many levels to create meaningful change. This guide relates the work of physicians and healthcare providers to the work of community activists and policy makers and explains how we can all come together to advocate for change.
- "Improving the Nation's Health Care System"- Chapter in *Informing the Future: Critical Issues in Health* (2009)

  https://nap.nationalacademies.org/read/12709/chapter/5

  - ○ Summary: A look at the healthcare system in the United States as a whole. This reading explains how much money the United States government spends on healthcare and how that impacts certain populations. The chapter is then broken up into specific problems facing the future of healthcare. The first identified problem is an expected increase in the demand for geriatric physicians as the baby boomer population ages. The second is advancing the nation's health agenda, which means restructuring health care practices that do not work well, and instead adopting community-based solutions. The third and final identified issue is ensuring that uninsured populations in the country are still able to access care when needed.
  - ○ Relevance: While it is important for pre-healthcare students to understand what can be done to alleviate health inequities at the doctor-patient level, it is also important to understand that these issues are systemic. Understanding a bit about

how healthcare functions at the systemic level is important for individual healthcare workers because it allows them to better understand the world in which they operate.

- ○ Discussion: This article is a great segue into discussions about healthcare as a system. Future healthcare providers may have tunnel vision and be thinking only about themselves and the individual interactions that they hope to have with their future patients. It is important to take a step back and consider the wider ramifications on society.

- "How Social Determinants Impact Healthcare"-TedTalk by Veronica Scott-Fulton
  https://www.youtube.com/watch?v=xAlxtog_4ns
  - ○ Summary: This is a very recent video that talks specifically about how COVID impacted American communities much differently based on their socioeconomic status. The speaker describes how powerful the social determinants of health are in terms of influencing health outcomes and ends on a positive note urging listeners to change the narrative.
  - ○ Relevance: Sometimes it can be much more engaging to watch a video than to read an article, and this short and concise TedTalk presentation does an excellent job of introducing the themes of the social determinants of health and relating them to healthcare and health inequities.
  - ○ Discussion: A brief video such as this one is important for putting faces to the stories and experiences that are being read about. Students could discuss how to 'change the narrative' on a local level that would be relevant to themselves, and the communities in which they plan to one day practice.

- "The Social Determinants of Health-Dr. Thomas Ward"- video

  https://www.youtube.com/watch?v=tuYRY0XKw9c&list=WL&index=2

    - Summary: This TedTalk by a southern doctor provides context about social inequalities in the Deep South during the Civil Rights era. Dr. Thomas Ward explains how access to healthcare is a Civil Rights issue, and how unequal health outcomes are largely influenced by social determinants of health that disproportionately disadvantage BIPOC populations. While the video is mainly a historical one, Dr. Ward does relate past examples to the more current situation in Flint, Michigan.

    - Relevance: Unlike the previous YouTube video that I selected; this is more of a history lesson. While it is important for students to understand the current situation, understanding the historical context that created the world we live in today is important as well.

    - Discussion: Key discussion topics in this video include how the historical context shapes the current world. After watching this video students might discuss other examples of health inequalities and investigate the historical context that relates to them.

- "Types of Racism: Internal, Interpersonal, Institutional, and Structural"-website

  https://www.ywcaworks.org/blogs/ywca/types-racism

    - Summary: A quick review of the different types of racism. Internalized racism occurs when an individual accepts the negative stereotypes about themselves, or

others. Interpersonal racism occurs when a person allows their bias to influence how they treat and perceive other people. Institutionalized (often called systemic) racism refers to the rules within an organization that discriminate against marginalized communities. And structural racism refers to biased laws or policies that limit people's access to certain resources based on their race.

○ Relevance: When discussing issues of race and equity, it is important to understand that racism is much more complex than the interpersonal experiences that many people consider to be racism. People may not want to acknowledge that racism is still very present in our world because they do not witness interpersonal attacks, but that does not mean that racism is not embedded in the very structure of our society.

○ Discussion: Students taking sociology or political science classes are likely aware of these ideas about race and racism, but none of the HPHY requirements include classes that talk about social issues in this manner. It is important to expose all students, especially ones who will be dealing with the public, to information about race and racism. As it exists currently, only HPHY students who are already interested in learning about these topics will choose to take classes and learn further. This is not an effective way to reach all students and make sure that these concepts are being discussed.

Learning Objectives and Class Assignments

- Learning Objective: Connect the social determinants of health to examples of health inequities.

    - Class Assignment: Find an example of a social determinant related to this theme that we did not read in class and write a brief (~1 page) paper or design an infographic explaining how it relates to the theme of health inequity, and what future healthcare professionals can learn from it.

- Learning Objective: Identify racial, socioeconomic, environmental, and gender health disparities.

    - Class Assignment: Identify an example of a health inequity and present it to the class. Include how the inequity is related to a social determinant of health and propose a step that could be taken to minimize the specific inequity.

- Learning Objective: Synthesize newly developed awareness to develop strategies for professional caregivers in your desired field.

    - Class Assignment: In groups based on professional interest (i.e., Dentists, Doctors, Nurses, P.T.s), produce and pitch to the class a strategy that could be realistically implemented in the field to minimize the disparities caused by social determinants of health.

- Learning Objective: List the 4 different types of racism and be able to classify examples.

    - Class Assignment: Make a discussion post and respond to two discussion posts providing examples of different types of racism and explain how the different levels of racism interact and how healthcare is impacted at each level.

THEME 2: Patient Centered Care

"Ask not what disease the person has, but rather what person the disease has"-Sir William Osler

(found in 'The Spirit Catches You and You Fall Down)

Patient centered care is defined as providing respectful and responsive care that ensures that patient values guide clinical decisions. In an ideal world, the medical decision reached by any patient would align with the decision reached by their healthcare provider. Realistically such an outcome requires understanding on both parties' parts and can only be reached with close collaboration between provider and patient. Communication goes two ways: the patient must receive the medical information in an understandable way and impart their unique conditions while the provider must listen to individual concerns and take them into consideration as they discuss diagnoses, procedures, and recommendations. To achieve regular, repeatable patient centered care, the values, preferences, and expressed needs of the patient must be paramount. The patient must be clearly and properly informed, put at ease emotionally, physically and mentally, and be given time and access to consult their family, friends, or other support network[18]. Access to care should be easy, timely, continuous and secure. Research by the Picker Institute has defined the following dimensions of patient-centered care: respect for the patient's values, preferences, and expressed needs; information and education; access to care; emotional support to relieve fear and anxiety; involvement of family and friends; continuity and secure transition between healthcare settings; physical comfort; and coordination of care [19].

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[18] Davis, Schoenbaum, & Audet, 2005
[19] Davis, Schoenbaum, & Audet, 2005

Consideration of these dimensions benefits all providers of healthcare. Primary for patient-centered care is care that safeguards personal dignity, respects cultural and spiritual values, and adheres to the desires of the patient. In order to supply such service, the provider must carefully recognize that not everyone will react as they would. People come into situations with their own ideas, beliefs, and opinions. The provider must be sure that the patients' values take precedence over their own. The provider should inform and educate the patient and should make recommendations but must recognize that the decision is ultimately up to the patient.

In order to ensure that a patient is in the position to make the best medical decision for themselves, healthcare providers need to be sure they are physically and emotionally comfortable. For important decisions (and what is important to a patient may vary), opportunity should be given to have the patient discuss the situation with family and friends. Of course, in emergency situations, action may need to be taken quickly. But, in most cases, pressure should not preclude allowing time to ensure that the patient is comfortable with their decision about treatment and willing to move forward.

Procedurally, care should be accessible, continuous, and easy to arrange. Every patient should have easy access to healthcare. Patients should not be given the run around to find a doctor, a test, a procedure, etc. A patient is already dealing with enough stress mentally and physically; red tape should not get in the way of care. Patients should not be pushed off to different providers nor should they be cherry picked because of interesting conditions or ease of treatment. All patients deserve reliable and continuous care. Patients are generally new to procedures while healthcare workers deal with them daily. The onus is on the healthcare provider to arrange care and make it easy on the patient.

In order to best practice patient centered care, healthcare providers should be aware of the concept of cultural humility. Cultural humility is defined by the University of Oregon as "the practice of self-reflection on how one's own background and the background of others, impacts teaching, learning, research, creative activity, engagement, leadership, etc." [20]. The University of Oregon office of Equity and Inclusion chooses to use the term Cultural Humility over Cultural Competence because competence implies that some final understanding can be achieved, whereas cultural humility prioritizes an experience of understanding as opposed to meeting a specific goal. In terms of patient centered healthcare practices, a provider with cultural humility acknowledges that their way of knowing is not the only one and makes room for the patient and their family to have differing opinions.

Proposed Sources

The following list is a preliminary selection of books, articles, podcasts, videos, or documents that are relevant to the topic of patient centered care and cultural humility.

- *The Beauty in Breaking-Michele Harper* (Book)
  - Summary: This book is a memoir written by a Black emergency room doctor, learning how to be the best possible physician in a field that is mostly white and male. The memoir begins with a description of Harper's childhood, follows her through medical school, marriage and divorce, and chronicles her experiences treating patients in an emergency room. Harper's perception of the cultural

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[20] University of Oregon, n.d.

background of the patients that she treats is a good example of a physician practicing cultural humility.

- ○ Relevance: It is important for students to read about the experiences of doctors, specifically of a BIPOC woman, navigating the healthcare world. Harper's insights about the human condition and the brokenness that we all experience at some point or another, provide a unique perspective that can broaden students' understanding of the complexities of healthcare. By incorporating diverse voices like Harper's into their reading repertoire, students can cultivate a more comprehensive understanding of the healthcare landscape and develop more thorough strategies to dismantle systems of injustice both within the medical field, and more broadly.

- ○ Discussion: Important discussions for students to have when reading this book include: How does the background and experience of the healthcare provider impact the patient? How does racism impact the author's experience in medical school and as a doctor in the emergency room? What personal attributes are needed to make a good medical care professional? What do hospital ethics boards or committees do? What are common reasons that people may go to the emergency room?

- *What is Culture-Centered Care? -Rhi Cook* (Article)

  https://blog.sporahealth.com/more-reads/culture-centered-care

  - ○ Summary: This introductory article on culture-centered care has been written to advertise a new online platform for receiving medical care. First the concept of

culture-centered care is introduced and defined as a holistic framework of a healthcare system that acknowledges and emphasizes the culture of the patient in all aspects to deliver care that is in line with their values, easy to understand, and effective. The article explains how the way in which health information is communicated to patients is important, and how it must take into consideration the cultural communication style of the specific patient.

- ○ Relevance: Spora Health is a telehealth platform designed for people of color to receive culture-centered care that is catered to their needs. Spora Health prioritizes culture-centered care and thus is a great example for other healthcare systems on how to treat BIPOC patients.

- ○ Discussion: This article defines 4 tenets of culture-centered care, which could be a helpful way to assess a student's current ability to assist culturally varied patients. Students could be broken into 4 groups and then report back to the class details and examples of the tenet of care that they have been assigned.

- ● *Communicating about Culture and Health: Theorizing Culture-Centered and Cultural Sensitivity Approaches*-Mohan J. Dutta (Article)

  https://doi.org/10.1111/j.1468-2885.2007.00297.x

  - ○ Summary: This article proposes that there exist two different types of health communication in cultural settings: a culture-centered approach, and a cultural sensitivity approach. A culture-centered approach is based on the commitment to building theories from within the culture, and a cultural sensitivity approach seeks to adapt the messages to the culture of the target audience. This article seeks to

understand and explain how culture is theorized and ultimately applied to communication about health.

- ○ Relevance: A more conceptual and denser read than many of the other articles, this piece provides a sociological perspective on culture and communication as they relate to discussions of health. Dutta argues that a culture-centered approach puts culture at the center of the communication about health, whereas a cultural sensitivity approach seeks to modify the message based on cultural norms. It is important for students to practice being critical of approaches to cultural informed health communication. Not all approaches are created equal, and while an attempt may be better than nothing, it is important to critically consider the ways in which culture may be mobilized and applied to health.
- ○ Discussion: After reading this article, students will be equipped to classify examples of health communication as culturally sensitive, or culture centered. Students will understand the different implications of each approach and better be able to participate in conversations about health and culture.

- *The Spirit Catches You and You Fall Down* - Anne Fadiman (Book)
  - ○ Summary: "The Spirit Catches You and You Fall Down" is a non-fiction book about a Hmong child with epilepsy, and the cultural clash between American doctors and the child's family. The book chronicles the medical journey of Lia Lee, and the experiences of her family members and doctors as they try to treat and care for her. The book emphasizes the importance of understanding and respecting different cultures.

- ○ Relevance: This book is commonly read in existing programs that train medical students and would also be relevant at the undergraduate level because of the themes of patient-centered care and cultural differences between physicians and patients. Reading an in-depth account of a cultural difference between patients and doctors helps students to engage with the concepts on a deeper and more personal level.

- ○ Discussion: How does the book "The Spirit Catches You and You Fall Down" illustrate the importance of patient-centered care? In what ways could the healthcare system improve in terms of prioritizing patient needs and perspectives? How can healthcare providers be sure that they are providing culture centered care and meeting the needs of diverse patient populations? How can healthcare providers juggle respecting patient autonomy and providing appropriate medical care? How important is communication with patients and their families in the healthcare field?

- ● *Racial Disparities in Health Care and Cultural Competency*-Ikemoto, Lisa. (Article)
  - ○ Summary: This article is a critique of the English-only, ethnocentric, and racist qualities of the healthcare industry. The author points out that interpreter services and cross-cultural training are often prioritized as the most important cultural competency activities, but providing true culturally competent care requires an understanding of culturally determined disease models that vary between cultures. The article argues for a 'more ambitious vision of health care and an expanded role of law in making change'.

- ○ Relevance: This reading is included in the UO Philosophy departments class on Medical Ethics because it presents many important concepts and theories such as: cultural competency, medical gaze, ethnocentrism, participatory decision making, racial profiling, pathologizing of bias, color blindness, and many more.
- ○ Discussion: Reading this article provides students examples of many important concepts that could be written about in papers or discussed in class discussions. In addition to presenting concepts and theories, the article also includes personal examples which tend to be engaging to students.

- ● "What is Cultural Competence and How to Develop It" -website

  https://extension.psu.edu/what-is-cultural-competence-and-how-to-develop-it
  - ○ Summary: This introduction to cultural competence from Penn State is not specific to medical situations, but instead speaks more broadly about cultural competence and why it is an important principle for all people to be aware of. The article defines cultural competence as "the acquisition and maintenance of culture-specific skills". Some skills are listed as a means to develop cultural competence including Practicing openness, being flexible, demonstrating humility, being sensitive to others, showing a spirit of adventure, and practicing positive change and action.
  - ○ Relevance: It is relevant for students to consider cultural humility not just through the lens of the medical field but also to be aware of how culture influences all the interactions that we have as people. It is also relevant to provide students with short and simple ways to improve their cultural humility.

○ Discussion: Students could be provided with real-world non-medical examples that involve situations of conflicting cultural beliefs and explain to their peers how they would respond to them in a culturally humble way.

Learning Objectives and Class Assignments

- Learning Objective: Describe the difference between a culture-centered approach to health communication and a cultural sensitivity approach to health communication.
    ○ Class Assignment: Post a discussion post and respond to two discussion posts on the topic of culture-centered health communication styles and culturally sensitive communication styles. Explain how they create different impacts on patients and the community at large.
- Learning Objective: Describe the concept of patient centered care and give examples of practices that are patient centered in introductions, communications, clinical care, and transitions.
    ○ Class Assignment: This theme has two books assigned, *The Beauty in Breaking* and *Being Mortal*. Both books discuss patient centered care and how to best achieve it. Students will select one of the two books and read it over the course of the theme, having discussions with classmates about the chapters from the previous night.
- Learning Objective: Explain the importance of effective teamwork on quality of patient care.

- ○ Class Assignment: In a discussion post, describe the members of a healthcare team and their role in relation to the patient, and to one another. Explain specifically the role of the patient within their healthcare team, and how to prioritize the patient perspective.
- Learning Objective: Explain how patient centered care is related to the concept of cultural humility?
  - ○ Class Assignment: Write a paper (~2 page) explaining the concepts of patient centered care and cultural humility. Elaborate on how the two concepts relate to one another and how both are important in the field of healthcare. Alternatively, create a visual representation of how borders shape one's life based on lack of cultural humility and culture-centered care.

THEME 3: Medical Ethics

"Medicine is not merely a science but an art. The character of the physician may act more powerfully upon the patient than the drugs employed." -Paracelsus

When most people think of medical ethics their first thought is the Hippocratic Oath, often paraphrased as "First, do no harm". Dating back to roughly 400 BC the Hippocratic Oath is the basis on which medical ethics has developed.[21] With changing cultures, customs, and technologies, medical ethics has evolved over many centuries to address the most complex issues facing medical practitioners including reproductive rights, end of life care, and patient confidentiality.

In recent history, the oath was revised significantly post World War II with the Declaration of Geneva. Updated several times since then, the Declaration of Geneva along with the World Medical Association's International Code of Medical Ethics provides ethical guidelines and enumerates required duties of healthcare professionals in not only their work, but also in their relationships to their patients, to their colleagues, and to society in general. Further revisions in 1964 emphasized humanization and compassion for the patient and recognition of the impact of illness on family and finances.[22] As technology advanced and more ethical dilemmas emerged Pellegrino and Thomasma published "Pellegrino's Precepts", a set of principles that provide guidance and stability in the face of the rolling tides of social opinion and politics.[23]

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[21] Kesselring, 2021
[22] Amnesty International, 2000
[23] Woodbury, 2012

While different medical professions specify slightly different precepts, today's basic philosophies of medical care consist of principles that guide both patient care and professional behavior. The four primary pillars of ethical patient care are:[24]

- Beneficence - the act of treating patients with kindness and mercy and acting in their best interest.

- Nonmaleficence - the classic "do no harm"; do not place undue burdens on a patient.

- Autonomy - recognition that the patient ultimately has the right to make their own decisions regarding their care.

- Justice - treating patients in similar circumstances with similar care; ensuring fair distribution of resources.

Additionally, veracity (being honest), fidelity (fulfilling commitments) and accountability (being responsible for your actions and decisions) are noted by many professional organizations as being beneficial in guiding interactions with patients.[25] Medical professionals must adhere to high standards of behavior regarding their profession to gain and keep patient and societal trust. They are obligated to:

- Keep up with latest skills and practices to ensure patients get the best care.

- Know what you don't know and ask colleagues for advice and help when needed.

- Respect colleagues in other medical fields - medicine is practiced in teams.

- Act professionally, maintain integrity in professional relationships.

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[24] American Academy of Physician Assistants, 2013
[25] Faubion, n.d

- Promote behaviors to benefit society.

Medical professionals must be educated in the latest science and technology and be able to apply their knowledge in a clinical setting. Their skills must be used to promote the patient's interest above their own. They should strive to advance their profession by promoting public trust in healthcare. Across medical fields of dentistry, nursing, physical therapy, pharmacology, and medicine, the primary tenant guiding ethics is that the patient comes first. The medical practitioner puts patient care above self-interest and acts to their best ability to help each and every patient.

Compiling lists of guidelines of ethical behavior in medicine is a good first step, but more important is understanding how to apply those principles in real situations. How do you determine the best course of action to find a morally acceptable solution from available options? Ideally, you would start with a virtuous person; one with high standards, open attitudes, and good character. However, those traits are hard to measure, and it is debatable as to whether such innate qualities can be learned. What can be assessed more accurately, however, is behavior that demonstrates professional and ethical virtues. Therefore, by training students to recognize, analyze, and resolve ethical issues, you can cultivate ethical behavior. For this to eventually come naturally and habitually, early exposure is beneficial.

Before addressing how to apply ethical guidelines, let's look at some examples of ethical issues in healthcare. Patient interactions can involve issues maintaining patient confidentiality, assessing patient competence in decision making, and consideration of families and culture. Access to healthcare issues include costs and insurance status, social disparities, and allocation of limited resources. Situations challenging professionalism include tradeoffs between training

medical students and optimizing patient care, interacting with impaired or incompetent colleagues, malpractice and negligence, dual loyalty to patient and employer, and conflicts of interest such as accepting gifts. And medical ethics include end of life care (advanced directives, DNRs, assisted suicide, determination of life), reproductive care (assisted reproductive technologies, genetic selection, cryopreservation of embryos, abortion, exploitation of women for surrogacy), organ donation (procurement and allocation) and mandatory vaccinations. This list is just a small set of potential ethical dilemmas that face healthcare workers.

To resolve ethical issues, the professional code of ethics must be considered and because medicine is practiced in teams, other team members, with their different points of view, should be invited to the discussion. In an environment that prioritizes the patient, the team should critically and systematically consider all courses of action and their likely outcomes to hopefully come to a mutually agreeable decision. In cases where this approach is unsuccessful, the issue should be escalated up a clear chain of command, utilizing ethics experts when needed.

One approach to solve ethical dilemmas is described at the RIGHT method [26]:

- Recognize the ethical dilemma.
- Identify points of view
- Gather resources and assistance.
- Have a plan.
- Take action based on ethical standards.

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[26] Sirek, 2012

Another plan is set forth by Trillium Health Partners as the IDEA method[27]:

- Identify the facts.

- Determine the relevant ethical principles.

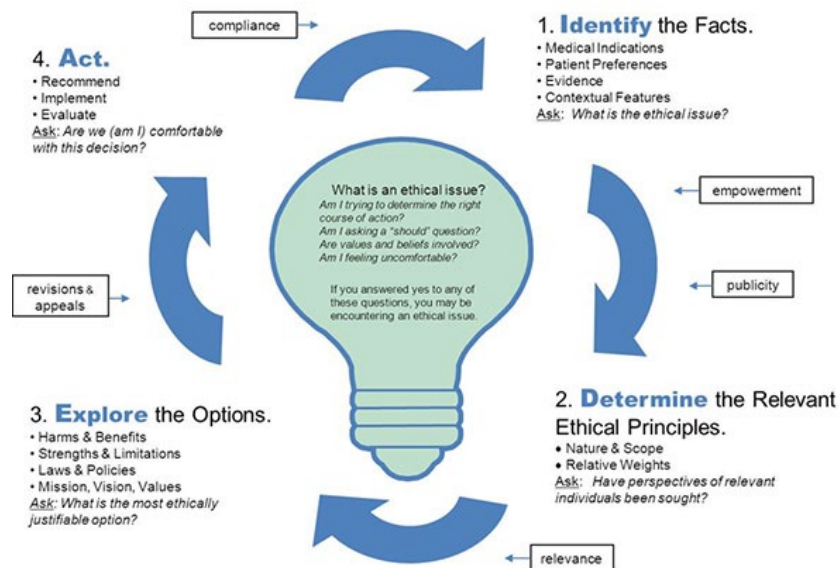- Explore the options.

- Act.

Figure 3: The IDEA Ethical Decision-Making Framework[28]

Plans involve identifying the issue, the relevant parties, and the applicable ethical principles. Next, and probably the most complex step, is determining what strategies to employ to come to a decision. Strategies of decision making should include consulting the principles as

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[27] Trillium, 2013
[28] Trillium, 2013

guidelines and evaluating likely outcomes of different choices. Once a final decision is made, reviewed, and revised, it should be acted upon followed by review and analysis of the outcome.

Through an examination of the foundations of ethics as it applies to decision-making in various healthcare fields, students will learn to apply ethical principles and virtues to make empathetic choices when faced with complex ethical dilemmas. This can most successfully be done with exposure to situations, practice analyzing possible scenarios, and guided peer discussions. To make ethical decision making habitual and natural, early exposure and practice are required. University of Oregon physiology students will benefit from a medical ethics curriculum and early exposure to the real-world issues facing healthcare providers. This will not only give students extra time to consider and reflect on their own moral values, but it also prepares them for advanced degree prerequisite situational judgements tests such as the computer-based Assessment for Sampling Personal Characteristics (CASPer) and Multiple Mini Interviews (MMI).

Proposed Sources

The following list is a preliminary selection of books, articles, podcasts, videos, or documents that are relevant to the topic of medical ethics. Ideally there would be a large enough selection such that students could choose to concentrate on sources most related to their field. For example, an aspiring ob/gyn may be interested in topics on reproductive healthcare while the aspiring dentist would likely choose another topic.

- *Semester Ethics Course-Jeffrey Kaplan (videos)*Semester Ethics Course condensed into 22mins (Part 1 of 2) and Semester Ethics Course condensed (Part 2 of 2)

- ○ Summary: Jeffrey Kaplan, a professor of philosophy at University of North Carolina Greensboro condenses his Introduction to Ethics course into two videos which gives a quick history and introduction to general ethics.

- ○ Relevance: Because there is no prerequisite ethics class, these videos give a general introduction to ethics and serve as a good building block to an introduction to medical ethics.

- ○ Discussion: Science students often are not given the opportunity to participate in discussions related to topics of ethics and these videos provide a great introduction to ethics as an area of study, not specifically relating to healthcare. Watching these videos and having conversations about the content included in them is a good way for students to warm to these kinds of discussions and get comfortable sharing their opinions.

- *The Immortal Life of Henrietta Lacks - Rebecca Skloot (book)*
  - ○ Summary: This is a non-fiction book about Henrietta Lacks, a Black woman born in 1920, and the immortal cells that were harvested from her cervix. Skloot explains to readers how Lacks's cells, which came to be known as HeLa cells, revolutionized medical research, and explores the ethics of extracting these cells without Lacks's knowledge or consent. Skloot also includes interviews from Lacks's family and describes how they live with minimal access to healthcare, despite the contributions that their mother, albeit unknowingly, made to the field of medical research. The main themes in the book include the intersections of science, race, and ethics.

- ○ Relevance: This book touches on many key ethical issues in medicine including: informed consent, patient privacy, and the exploitation of vulnerable populations.

  ○ Discussion: Examining Henrietta Lacks' story and the ethical implications surrounding the use of her cells, the book prompts critical discussions on the responsibilities of healthcare providers, the importance of patient autonomy, and the need for equitable treatment in medical research.

- ● *Being Mortal- Atual Gawande (book)*

  ○ Summary: *Being Mortal* is a nonfiction book that explores themes of aging and death, and how often the medical system fails to prioritize quality of life for dying patients. The author is a doctor himself, but also includes personal stories such as the death of his father. The main idea in the book is that medical professionals should focus on assisting patients in living comfortable and meaningful lives rather than prolonging life. This can be achieved by prioritizing conversation between doctors and patients about end of life.

  ○ Relevance: This book is also commonly read at the medical school level when teaching medical ethics related to end-of-life care. Conversations about end of life are important for all healthcare professionals, not just palliative care specialists. As Gwande explains, accepting death as inevitable is often the opposite of what healthcare providers are taught to do. Yet it is the first step towards creating the best end of living care possible.

  ○ Discussion: Many relevant discussions could be had in relation to the themes of this book. The book covers: medicalization, doctor patient communication, assisted living and nursing homes, aging, independence, and death.

- *Cases in Medical Ethics: Student-Led Discussions -Chris Cirone (website)* [Cases in Medical Ethics: Student-Led Discussions](#)

  - Summary: From the Markkula Center for Applied Ethics at Santa Clara University, this article presents sample ethical cases including discussion questions. This document is a reflection from an instructor who introduced these topics to undergraduate students interested in healthcare.

  - Relevance: This is a great discussion starter with topics on Autonomy, Euthanasia, Reproduction, and BioTerrorism.

  - Discussion: After each 'case', there is a list of questions and details which can inspire students to formulate relevant questions on additional ethical topics for discussion or written papers.

Learning Objectives and Class Assignments

Introduction to conceptual and theoretical concepts in ethics through lectures and readings must be complemented with sufficient small group discussions in order to give students practice at applying those concepts in guided and supervised conversations. The primary assignments for this section will be informed participation in class discussions, interpretation and synthesis of class materials, and written analysis and personal reflection of ethical dilemmas.

- Learning Objective: Understand how professional ethical statements guide professional decisions and behavior and apply the basic tenets of healthcare ethics: autonomy, beneficence, nonmaleficence, and justice.

- Class Assignment: Many ethics programs have included some type of 'Medical Ethics Bowl"[29] because it allows many topics to be introduced and students to answer quickly. Later research and reflection on such gut-reaction answers would provide indications of how individual morals may vary from ethical solutions.

- Learning Objective: Develop language and skills to communicate articulately and respectfully about ethical issues and instigate and participate in professional discussions clearly supporting your opinions with moral philosophy.
  - Class Assignment: Students will be assigned an ethical case study as well as a stance and will debate their peers in class and then write a reflection paper about the topic and have a chance to include and support their own opinion.

- Learning Objective: Apply relevant ethical professional statements to guide clinical decision-making bearing in mind virtues and values and ethical theory.
  - Class Assignment: Introduce case-based studies in a kind of "What would you do?" scenario. Include a variety of situations such as:
    - When is it morally justifiable to withhold information from a patient?
    - When is it morally justifiable to breach confidentiality?
    - Terminally ill patient ethics
    - Issues of healthcare delivery such as access and cost
    - Obtaining consent for treatment and how to proceed if patient is not fully competent to consent or refuse treatment.
    - Cases in Medical Ethics [30]

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[29] Merrik, n.d.
[30] Cirone, n.d.

- Learning Objective: Identify relevant ethical issues in the student's area of professional

  interest and provide suggestions on how to handle such dilemmas.

    ○ Class Assignment: Write a discussion post introducing the areas of ethical

      concern within a specific medical field to the rest of the class and use the concepts

      we have learned so far in class to propose solutions. Respond to two of your peers

      who posted about a different medical field.

Counter Argument and Rebuttal

It could be argued that the Human Physiology major at University of Oregon is well constructed and complete as is. It is a Physiology major not a healthcare major and thus equity and ethics are outside its purview. Further, the major already addresses issues of equity within each class by ensuring, for example, that doctors are not always portrayed as older white males. Some may claim that the major is full of requirements already and there is limited room to add additional required credits. Additionally, opponents of a Medical Equity and Ethics class requirement may maintain that the undergraduate level is too soon to introduce the ideas since at this point it is just theoretical, and a clinical setting would be more appropriate.

HPHY at the University of Oregon is a well-respected and well-constructed major. As one of the few undergraduate programs with a cadaver lab, it is a leader in undergraduate education, giving UO students advanced training in human physiology that usually is not encountered until the graduate level. Including a required Medical Equity and Ethics class would be a similar evolution of an undergraduate healthcare major. There is no official Pre-Healthcare major and UO, and so HPHY is the de facto choice for most aspiring healthcare professionals. The fact that the vast majority of HPHY students pursue a career in healthcare clearly places relevant healthcare issues within the scope of the HPHY major. The issues of Medical Equity, Patient Centered Care, and Ethics addressed in this paper are significant enough to warrant their own class. It is not enough to merely mention such primary healthcare issues as an aside in various classes. Such a haphazard approach is not likely to provide a full systematic introduction to the care side of healthcare. Regarding the number of required classes, according to the College of Arts and Sciences Major Map, within the Healthy Communities Flight Path the HPHY major requirements at 98 credits are in about the middle, with Biology and Neurology majors requiring

109 and 103 credits respectively, and General and Multidisciplinary Science requiring only 76 major credits[31]. This data refutes the claim that there is no room in the HPHY major for an additional required class as even with an additional 4 credit major requirement, HPHY would still have fewer major requirements than Biology and Neuroscience majors. Lastly, the issue of timing is to be addressed. While it is true that issues of medical equity and ethics are largely theoretical at this point in our education, it is also obvious that these issues will eventually need to be introduced. The clinical setting may be too late for two main reasons. First, many issues in healthcare are time critical and decisions need to be made quickly. Better to be prepared and to have considered equity and ethical decisions before being put in an awkward situation and not having time to fully think through consequences of our actions. And second, development of ethical behavior takes practice. Recognizing cultural differences and socioeconomic disparities that may impact decisions is advanced through exposure and discussion. The more opportunity to recognize inequitable and unethical behaviors, the more prepared we will be to competently face difficult decisions. Senior year of undergraduate education is the ideal time to introduce a required class in Medical Equity and Ethics because we will have a good idea of our individual career goals, yet we will still be surrounded by peers entering different healthcare professions. Having potential doctors, radiologists, dentists, pharmacists, and other healthcare careers represented will add a dimension to discussions that cannot be achieved once we separate into professional schools.

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[31] University of Oregon, n.d.

Conclusion

This thesis proposes an additional requirement to the well-respected HPHY program at the University of Oregon in the form of a supplementary course in Medical Equity and Ethics. This class will be an introduction to issues that graduates will likely face in careers in medicine. Because a majority of HPHY majors are seeking careers in healthcare, this requirement will be advantageous to students as they consider, interview, and apply for graduate level programs. Such a course is by no means meant to be an exhaustive list of all the issues within medicine and healthcare, rather it is an introduction to subjects that are best mastered through exposure, discussion, and self-reflection. Since it takes time to become proficient in these skills, introducing concepts of social determinants of health, patient centered care, and medical ethics at the undergraduate level will be beneficial to aspiring healthcare professionals.

Firstly, social determinants of health will be examined to see how factors such as socioeconomic status, ethnicity, and gender affect patient care in areas of availability, prevention, treatments, and diagnoses. Secondly, patient centered care takes a holistic view of the physiological, psychological and sociological variables of the patient and involves and empowers patients, along with their support system, to make the most effective choices in their own treatment. The idea of cultural humility will be introduced allowing students to self-reflect on their own values and expand their appreciation for different cultural mores. Lastly, ethical principles of autonomy, beneficence, justice, and nonmaleficence will be introduced and ethical dilemmas will be analyzed and discussed. The introduction to medical ethics at the undergraduate level will be advantageous in that it will allow maximum time to practice and habitualize ethical decision making.

Together, these prevalent healthcare themes deserve consideration at the undergraduate level in the education of aspiring healthcare providers to develop informed and ethical professionals that provide holistic service to patients and communities. I see this project as a call to action to shape more compassionate, humble, and thoughtful graduates.

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