# Contents

# 2022

## September

### Module 1 Blog: Introduction Post (2022-09-18 20:48)

Hello, Dr. Butler! My name is Andrew Ganea and I'm a first-year student in the Bachelor of Health Sciences program. I'm from Mississauga, Ontario, and I'm excited to be taking this course, as I've never taken a philosophy course in high school.

In terms of my interests in the health sciences, I am fascinated by the field of neuro-science, and I wish to pursue a career in neuroscience after I graduate. I was also interested in anatomy from a young age, so I'm looking forward to taking ANAT 100 in the winter semester! At the recent poster fair in the Biosciences Complex, I even bought a poster of the brain to put up in my dorm room:

A poster of the brain, showing the different regions, views, and even the removal of a blood clot.

I'm looking forward to learning about the history of some of my favourite fields of healthcare, such as anatomy and pharmacology, while also getting to learn more about health ethics. I've seen a glimpse into health ethics in high school Biology class, but I'm excited to learn more about it at a university level. Since this course is about blogs, I'll probably look through this resource: [1]https://blogs.bmj.com/medical-ethics/ to find more blog posts related to health ethics.

I've always liked the analytical sciences such as chemistry and physics, and I feel more comfortable doing empirical calculations rather than creating abstract pieces of writing. Therefore, writing the blog posts for this course are going to take more time and effort than some of the work in my other courses, but I think I can still manage if I keep up with the modules each week.

Lastly, I've been tasked with creating a SMART goal to follow throughout my time in this course. The completed form with my SMART goal can be found at the hyperlink below:

[2]Andrew Ganea Smart Goal Template

That's it for the first module.  I'm looking forward to writing more blog posts in the near future!

1. https://blogs.bmj.com/medical-ethics/
2. https://courses.cherylcline.org/andyganea/files/2022/09/Andrew-Ganea-Smart-Goal-Template.pdf

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vanessak (2022-09-21 17:14:59)
Hi Andy, it's nice to e-meet you.  My name is Vanessa and I'll be your TA this semester.  The BMJ is a great resource for these blogs in terms of writing style, thanks for sharing!

## October

### Module 2 Blog:  Would I Donate My Body for Anatomical Education (Dissection)? (2022-10-05 01:22)

Learning about the history of anatomy throughout Module 2 has illustrated to me the paradigm shift that occurred in the study of anatomy itself.  After reflecting on the materials provided in Module 2, I have decided that I would plan to donate my body for dissection.

Before diving into my reasons for donation, the decision of whether or not to donate one's body to science is still a significant issue to this day.  Someone can either choose to donate their body to a public or private institution, or they can choose to donate certain organs after their passing (Branswell, 2008).

Someone can choose to donate their brain to a brain bank like this one for research and study (Toomey, 2019).

Throughout this post, I will go into the details of why I would like to donate my body and the reasons behind this choice.

Firstly, my donated body will provide medical students and medical professionals with an invaluable resource to gain experience with dissection.  Budding surgeons would be able to practice surgical techniques before actually doing them on a living person.  My body would also be a valuable asset for the training of pathologists, emergency medical technicians, and

forensic investigators, as knowing anatomy is a key component in those fields of medicine as well (Bauer, 2021). Additionally, a common point that was emphasized both within the module and within the documentary, *The Body Donors* , was that the most effective way for students to learn about anatomy is through hands-on experiences. If I develop a rare disease later in life, I would also be compelled to donate my body to science as it will greatly assist in developing scientific literature and research around that rare disease. This podcast interview with Kim Claridge from the London Anatomy office provides more details on the history and current state of body donation:


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However, when reflecting on this multifaceted question, I also deeply considered the reasons why someone would oppose donating their body. One perfectly valid reason would be due to familial or religious reasons. In Canada, a person cannot donate their body to science without their family being in full agreement with the donation (Branswell, 2008). A study done in the United States reports that other reasons that people would not want to donate their bodies include mistrust of the donation system, belief that their organs would be donated to a black market, or that they will end up with a bad actor (Morgan et al., 2008). The same study also provided a thought-provoking finding that religion both compels people to donate their bodies but also to not donate their bodies depending on which religion they follow (Morgan et al., 2008).

The fear that someone's body will fall into the hands of a bad actor after death is a fear that I share when thinking about body donation. Therefore, I will place a restriction on my body to be used strictly for educational and research purposes, and not for public use, such as being put up in a museum exhibit. My view on this matter came after I reflected on Body Worlds during the second discussion of the module. The creators claim that Body Worlds was made purely for educational purposes (Körperwelten, 2021), but I believe that they are merely putting on a spectacle to satisfy morbid curiosity.

The displays that Body Worlds put up feel eerily similar to former Queen's medical classes posing with their cadavers.

After learning that Body Worlds decided to create an exhibition that shows two cadavers copulating, I decided that putting my body directly in the hands of students and professionals that want to learn would be better than donating it for the public to see. I would rather have my body displayed and used for dissection while educating others, which the creator of Body Worlds has also done on YouTube:

Moreover, the textbook readings and multimedia assets present throughout the module

further solidified my decision to donate my body to science. As I was reflecting on the module, I realized that the everyday layperson only knew what was inside their bodies at the tail-end of human history. This happened because the only times that the field of anatomy advanced was when someone conducted hands-on observations on a cadaver. Throughout Antiquity and the Medieval Era, dissections were rare, so the only breakthroughs that occurred were the findings of individuals like Galen that performed his dissections on animals (Duffin, 2010). Even as Vesalius published his magnum opus, *Fabrica* , all he was doing was replacing the old first-hand observations of Galen with ones of his own (Duffin, 2010). The pertinence of practicing hands-on anatomy on cadavers was greatly summarized by Dr. Leslie MacKenzie at the end of the module. A first-year surgical resident needed to identify the ureter on a patient, but he could not as he was looking for a yellow structure.

Anatomy textbooks almost always colour the ureter yellow, while a real human ureter is not yellow (Winslow, 2010) & (Novaes et al., 2013).

Even as the future of anatomy marches forward with innovations such as detailed models of the human body being available for free online, my decision to donate my body to science will ultimately give medical professionals the hands-on experience they need to enter their field of expertise with confidence and competency.

Word count without citations or captions: 803

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Toomey, E. (2019, August 21). *Inside a Brain Bank, Where Humans' Most Precious Organ Is Dissected And Studied.* Smithsonian Magazine. Retrieved from https://www.smithsonianmag.com/science-nature/inside-brain-bank-where-humans-pr ecious-organ-dissected-studied-180972945/.

1. `file://html5-player.libsyn.com/embed/episode/id/22585337/height/90/theme/custom/thumbnail/yes/direction/forward/render-playlist/no/custom-color/88AA3C/`

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vanessak (2022-10-13 02:17:17)
Hi Andy, Good job on your first blog. I like that you incorporated the module content and external sources to create a coherent narrative. The part about religion seemed a bit out of place as you didn't speak to how or if you related to it. I thought the multimedia you selected were appropriate for your blog. In the future, you do not need to use as many images as it can be overwhelming for the reader. Vanessa

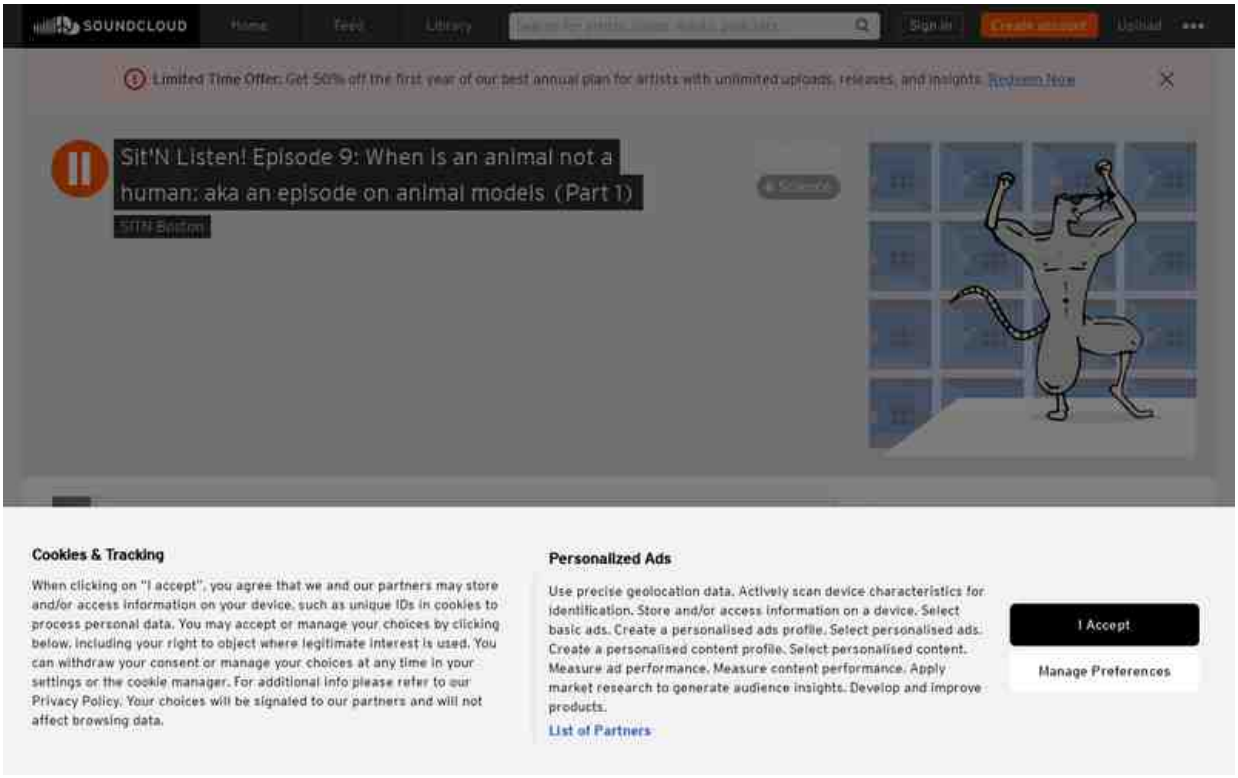
## Module 3 Blog: Animal Experimentation (2022-10-26 23:10)

The study of modern physiology was spearheaded by the emergence of mechanism, empiricism, and experimentation. These ideologies combined to say that physiology can only be furthered by conducting experiments on living beings. After the gruesome horrors that Nazi Germany committed against the Jewish population in World War II, the Nuremberg Code was established (National Institutes of Health, n.d.), setting strict guidelines for utilizing humans in experiments, as explained in this video:


To still satisfy the craving for empirical research and to not fall back on vitalism and speculation, physiologists had to turn to animals to assuage their empirical needs (Duffin, 2010).

In my opinion, it is only ethical to use animals in experiments under extremely strict guidelines that ensure that the animal does not experience any pain or suffering. I also believe that it is ethical to minimize and possibly eliminate the use of animals in research entirely.

A critic of my position would therefore be someone who argues that animals should be used in experiments, regardless of if they suffer or not, and that the use of animals needs to be ubiquitous throughout the study of physiology. From a philosophical standpoint, the critic can argue that a moral right can only be defended by a being that is capable of making a moral claim and is able to comprehend the rights that they have (Cohen, 1986). Humans live in communities governed by moral rules and have the capacity to comprehend the rights that they hold and enact on each other, but animals do not have this moral capacity (Cohen, 1986), explained by the following Harvard podcast:




IFRAME: [1]http://soundcloud.com/sitn-boston/episode-9-when-is-an-animal-not-a-huma n-aka-an-episode-on-animal-models-part-1?utm _source=clipboard &utm _campaign=wtshare &utm _medium=widget &utm _content=https %253A %252F %252Fsoundcloud.com %252Fsitn-boston %252Fepisode-9-when-is-an-animal-not-a-human-aka-an-episode-on-animal-models-p art-1

Following the Nuremberg Code, humans have the capacity to give voluntary consent to an experiment, but animals are incapable of giving voluntary consent, as they have no means of communicating consent to a human researcher. Additionally, experimentation on animals in the past has given rise to many essential treatments for human diseases due to the popularity of mechanistic studies in physiology (Archer, 2015). From a utilitarian standpoint, even if the animals used in an experiment have to suffer, the experiment could still be morally right if the results could prevent a larger number of humans from suffering from a seemingly preventable disease (Cohen, 1986).

Infographic that summarizes the research that has been performed on dogs, and how that research has benefitted humans.

In response to this position, there are some similarities that a critic of my position would have with my own opinion. The first similarity would be that we both would agree that it

is not morally acceptable to do absolutely anything to an animal. I also agree that animals should not be given all the rights of humans, such as the right to vote, but they must be granted other fundamental rights. This is where our stances differ, as I know that since animals can feel pleasure, pain, suffering, satisfaction, and frustration, and can carry out many other actions that humans can (Gruen, 2017), they should be treated as entities with inherited value. Humanity knows that certain animals feel pain due to the existence of their nervous system because of the rise of experimentation, and interpreting their signs of pain is recognizing their moral claims, making those animals morally considerable (Singer, 1973). Some animal behaviours are innate, so confining animals in an experiment, no matter how clean and humane the confinement may be, will also cause the animal to suffer as they regret not participating in their normal, innate behaviours (LibreTexts Biology, 2021). Research in animals has even been found to be ultimately ineffective due to the physiological differences between animals and humans (Queen's Animal Defence, 2016.). These ethical claims come together to suggest that animals should not be subjected to any form of suffering during experimentation, as they have fundamental rights that must not be trumped by human researchers. However, a practical limitation of my stance would be that due to the guidelines put in place to conduct preclinical trials on animals, some specific tests and experiments would not be allowed to occur, resulting in a reliance on speculation.

This flowchart gives a general overview of the process a substance has to go through to be approved by the FDA. This process applies to the United States, but a similar process exists in Canada, with preclinical research on animals being a cornerstone of the process (The University of Texas at Austin, n.d.).

My view of animal experimentation at the beginning of the blog was that it should not be allowed, but it has changed to being allowed but with certain restrictions. After learning about all of the scientific advances that were made by researching the counter-argument, my belief shifted to one that only allows experiments that absolutely need animals, and that do not cause suffering to those animals.

In conclusion, the scientific community should actually focus on ethical human-based research to fulfil the principle of using non-animal alternative methods to achieve research goals (Lee, 2019). By barring funds to animal research that knowingly causes harm to an animal, regardless of how much benefit it could have to humanity, it will redirect funds towards research in effective, human-based clinical trials.

Diagram showing how humans have been used in research trials to treat Alzheimer's using human stem cells (Lee, 2019).

Due to the ubiquity of animal research and experimentation in physiology, it is unlikely that this push will eliminate animal research altogether, but it will certainly reduce the amount of suffering that animals undergo to satisfy the means towards a human's end. Ultimately, this will satisfy physiology's desire for empiricism and experimentation while also being moral and humane to both humans and animals alike.

Word count without citations and captions: 825

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1. http://soundcloud.com/sitn-boston/episode-9-when-is-an-animal-not-a-human-aka-an-episode-on-animal-mode

ls-part-1?utm_source=clipboard&utm_campaign=wtshare&utm_m

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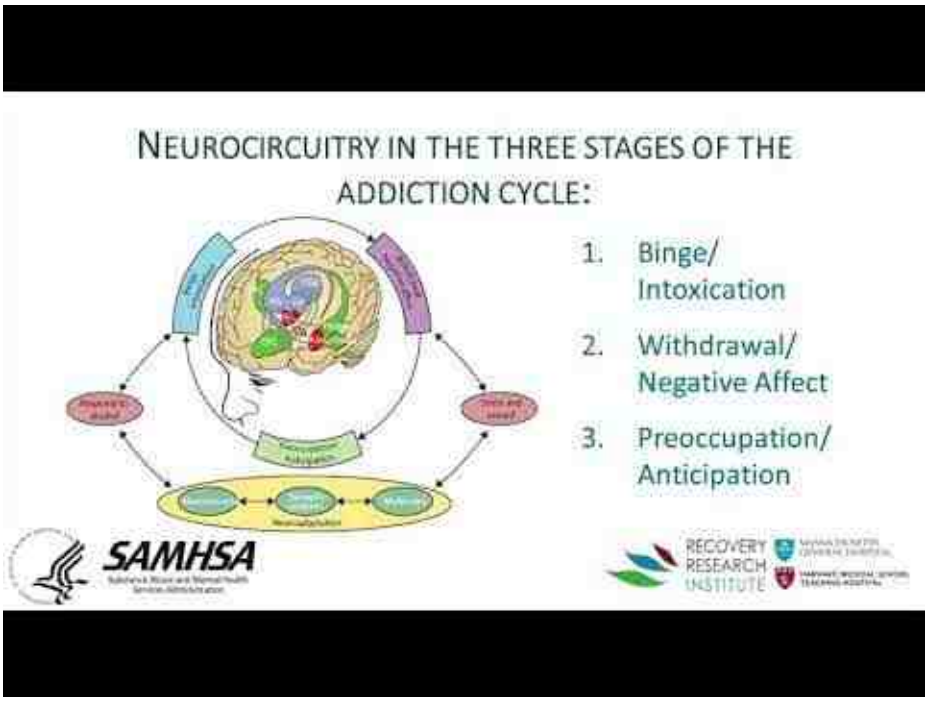
vanessak (2022-11-03 14:56:02)
Hi Andy, Your introduction is concise but provides the reader with good insight into the topic of your blog. You also did a good job teasing out the similarities and differences between the two viewpoints. A lot of your points were very “big picture” (which is totally fine!) but can be enhanced with more specific examples, adding depth to your blog. For example, you state that animal experimentation has given rise to essential treatments for human diseases in the past – can you provide any examples? Since your blog is on the longer side, consider using subheadings to organize your blog. Vanessa

## November

### Module 4 Blog: Is It a Disease Or Not? (2022-11-11 02:35)

The National Institute on Drug Abuse, the Substance Abuse and Mental Health Services Administration, and the National Institutes of Health all consider drug addiction a disease (SAMHSA, n.d.). They describe addiction as a chronic disease in which an individual compulsively seeks out and uses drugs despite any consequences that might come with consuming the drug (Thomas, 2022). To support this viewpoint, these organizations have constructed a disease model to justify why drug addiction has to be classified as a disease, which is elaborated on by this video from SAMHSA:



However, I believe that the current disease model of drug addiction is flawed due to critical misunderstandings about drug addiction. Therefore, I believe that drug addiction should not be classified as a disease but rather a disorder characterized by the dysfunction of the brain due to drugs.

## The Current Viewpoint on Addiction:

To set some context, one must first examine the disease model of drug addiction that currently exists within the medical status quo. This model seeks to cover the six elements of any standard disease concept, which are: illness, patients, diagnosis, prognosis, causes, treatments, and prevention (Duffin, 2010). Addiction manifests as cravings for a drug due to neurochemical changes in the dopaminergic system, causing dopamine to be released in excess amounts or to not be reabsorbed as effectively (Partnership to End Addiction, 2022). Drug addiction can affect anyone, but certain people are at greater risk to become addicted due to their genes, gender, ethnicity, and most importantly, stage of development (Thomas, 2022). Numerous criteria have been developed to diagnose drug addiction, with two important ones being increased tolerance and the signs of withdrawal symptoms.

An infographic that gives a general overview of opioid addiction. This infographic presents some symptoms of drug addiction, such as weight loss and changes in physical activity.

The prognosis is that drug addiction permanently alters the function of the brain, leading to cravings for the drug long after a person has remained abstinent (Thomas, 2022). Multiple causes for drug addiction have been identified, like family history, adverse childhood experiences, academic and athletic failure, or most importantly, pressure from peers or colleagues (Thomas, 2022). Treatment begins with an evaluation of the addiction, which could lead to professional detoxification and other pharmacological or non-pharmacological treatments in inpatient or outpatient settings, as explained in this podcast episode:


IFRAME: [1]https://playlist.megaphone.fm/?e=SPMLLC2770342459

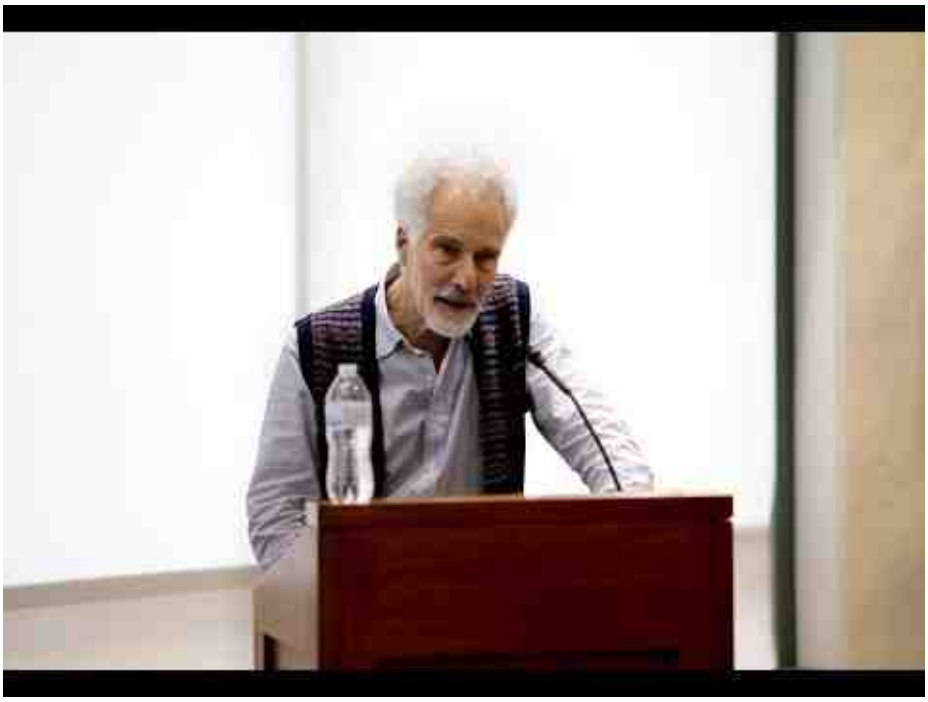
Observers can use the above knowledge to be the third corner in the Hippocratic triangle of drug addiction, further cementing it as a disease. Lastly, the external and internal causes of drug addiction are explained using the ontological and physiological cause-based theories and the patient-based organismic model, as drug addiction is seen as a harmful, hopefully discontinuous disease that must be treated.

## The Flaws in the Status Quo:

My first point in response to this disease model is that the illness must cause suffering to the patient in every conceivable environment for an observer to consider drug addiction a disease (Levy, 2013). For example, a brain disease like Alzheimer's will cause suffering in any accessible environment to the patient, making it a disease. However, an accessible environment that a patient can be placed in removes the drug and its cues, effectively removing the illness from the patient without any treatment (Levy, 2013). If an observer examines a person in such an environment, they would conclude that the person is not suffering from a disease, but rather in possession of a brain disorder. Additionally, long-term changes in brain structure due to addiction are not strong enough evidence of a disease, since similar physiological changes occur during investment in learning a new skill, falling in love, or religious conversion (Valentish, J.).

The disease model visualizes addiction as a vicious cycle that is difficult to escape. However, these neuroadaptations are not mutually exclusive to drug addiction, and fail to show the pathways in which this cycle can be escaped without treatment.

A study performed on the addicts of cocaine, alcohol, and heroin addicts found that during a period of six months to a year after quitting, the area of the addicts' prefrontal cortex that is responsible for inhibition showed signs of improving beyond the baseline (Valentish, J.). The key to this study is that the participants refrained from taking the drug and showed signs of improvement. The lack of the need for treatment directly violates the current disease model, further proving that drug addiction is simply a disorder. An assumption of my viewpoint is that the drug that is being used does not lead to a patient developing a known disease due to drug use. This assumption and viewpoint are further explained in this lecture by Dr. Marc D. Lewis:



## Why is Re-Classification Important?

By not occurring in every accessible environment, the ontological theory can be used to prove that drug addiction is caused by external social factors. Effective treatment of drug addiction includes the reallocation of funds towards resources that remove patients from their social environment and impede access to drugs and their respective cravings (Heyman, 2014). Preventative measures that reduce the amount of suffering due to drugs must include emphasis that addicts can stop themselves from using drugs, encourage enticing actions

that compete with drug use, and provide positive role models of past patients (Heyman, 2014). Ultimately, the re-classification of drug addiction as a brain disorder will remove the stigma that drug addiction is a chronic disease that always requires treatment. Instead, drug addiction must be classified as a preventable disorder that does not inhibit a person's ability to retake control of their life.

Word Count without citations, captions, or sub-headings: 811

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1. https://playlist.megaphone.fm/?e=SPMLLC2770342459

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vanessak (2022-11-19 21:51:26)
Hi Andy, You did a good job applying the six disease elements to drug addiction. In doing so, you made a very compelling argument for why it should be considered a disease. Explicitly mentioning the difference between a "disease" vs. "disorder" can help set the stage for the reader. To provide more compelling evidence for why drug addiction shouldn't be considered a disease, consider using more

sources to back your claim. Additionally, your references list should be in alphabetical order. Vanessa

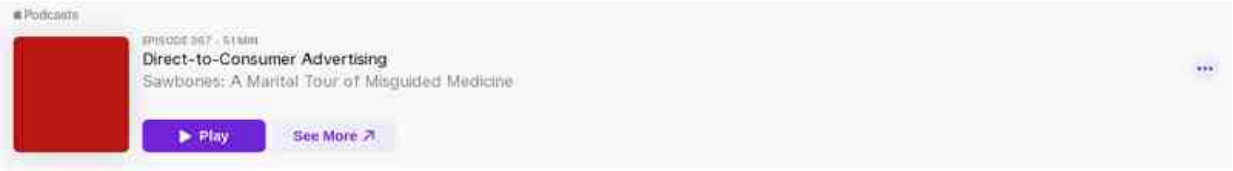
**Module 5 Blog: Should Direct-to-Consumer Drug Advertising Be Permitted? (2022-11-25 02:36)**

“Ask your doctor if [the drug being advertised] is right for you”. This simple phrase is one of the key identifiers that an ad can be classified as direct-to-consumer pharmaceutical advertising (DTCPA). DTCPA is defined as any advertisement that is created by a pharmaceutical company for the sole purpose of promoting prescription drugs directly to patients (Ventola, 2011). These ads are present in a multitude of media forms, such as newspapers, radio, and television. The only countries that fully allow DTCPA are the United States and New Zealand (Abel et al, 2006).

An infographic that shows the two countries that allow DTCPA, along with some statistics about DTCPA.

Why is DTCPA Important?

DTCPA is an important social issue because Canadians regularly consume American media and are exposed to DTCPA, which includes both the drug and its indication, even though such ads could not be made in Canada (Silversides, 2008). Additionally, the existence of DTCPA showcases a conflict between the consumer and the drug company. As life expectancy increases, people become afraid of ill health, so they seek remedies to maintain good health. However, drug companies that produce DTCPA are not as concerned about creating drugs that improve health as they are concerned about making a profit, reducing their patients’ trust in DTCPA and the drugs they advertise, as explained in this podcast episode:




IFRAME: [1]https://embed.podcasts.apple.com/us/podcast/direct-to-consumer-advertising/id665149280?i=1000520078582

## What are the Arguments Against DTCPA?

To make an informed decision on whether DTCPA should be permitted everywhere, both sides of the argument have to be illustrated. A major argument against DTCPA is that it misinforms patients. This is proven by a 2007 study which found that 82 % of DTCPA ads contain factual claims about a drug, but only 25-26 % of DTCPA ads describe causes, risk factors, and prevalence (Frosch et al, 2007). Misinformation also manifests itself in the form of the post hoc ergo propter hoc fallacy. DTCPA suggests that better health solely comes from the drug that it is advertising without considering the other activities the person might be doing to actually improve their health. Another study found that doctors are more likely to prescribe a drug if a patient specifically requests it after viewing DTCPA (desLibris, 2016). This is a direct effect of disease mongering because healthy patients think that they need to be treated for a new, broadly defined disease, and a surge of papers in academic literature convinces doctors to prescribe the medication as well. A limitation of these arguments would be that any underdiagnosed disease that is being advertised with DTCPA is not actually underdiagnosed, but rather only had a deluge of papers saying that the disease is underdiagnosed.

This bar graph shows how much spending has increased on producing DTCPA, regardless of its

drawbacks. It is important to keep in mind that this shows spending in the United States, which is one of two countries that fully allows DTCPA.

## What are the Arguments for DTCPA?

On the other side of the argument, this limitation directly leads to the argument that DTCPA reduces the underdiagnosis of rare conditions. An FDA study that found that 88 % of patients that asked their doctor about a medication due to DTCPA had the condition that the drug was being advertised for (Aikin, 2004). For example, Procrit, a drug used to treat anemia was severely underprescribed before an advertising campaign for Procrit was released (Abel et al, 2006). DTCPA was a substantial reason why Procrit had a dramatic increase in its use to treat anemia (Abel et al, 2006). Another argument that can be made in favour of DTCPA is that it encourages patients to comply with the directives that their doctor gave them about taking a drug. In the same FDA study, it reported that 33 % of physicians found that DTCPA increased patient adherence to taking a prescribed drug because DTCPA serves as an active reminder of someone's medical conditions and prescriptions (Aikin, 2004). This Vice video concisely summarizes both sides of the argument:


## What are my Opinions on DTCPA?

Upon reflecting on these positions, I agree more with the viewpoint that DTCPA should not be permitted. The misinformation perpetuated by DTCPA directly affects the most important

stakeholder in this controversy, which are the patients. Doctors and pharmacists have spent large portions of their life studying medicine, so I do not agree that their professional opinions should be swayed by companies that are focused on making a profit. Due to the lax guidelines for DTCPA set by the FDA, drugs can also be advertised before their safety profiles are fully known, which is only exacerbated if a patient requests this unsafe drug from their doctor who also believes it is safe.

The ad shown above is for Lunesta, a sedative that is used to treat insomnia. This ad is plagued by disease mongering as insomnia is a complex set of symptoms with a variety of causes. By making generalizations about insomnia, this ad will lead to an overdiagnosis of insomnia, and therefore an inappropriate amount or dosage of Lunesta being prescribed. Disease mongering also convinces patients and doctors that insomnia can be treated or cured with a magic bullet drug. The final nail in the coffin for Lunesta is that the FDA found that it has side effects that were not reported in the original ad, showing how misinformation plagues DTCPA (FDA, 2014). In conclusion, drug companies should divert their efforts from creating DTCPA towards preventive healthcare and educational campaigns about drugs led by nonprofit organizations, since these organizations will not have profit in mind when creating their campaigns.

Word Count without citations, captions, and subheadings: 825

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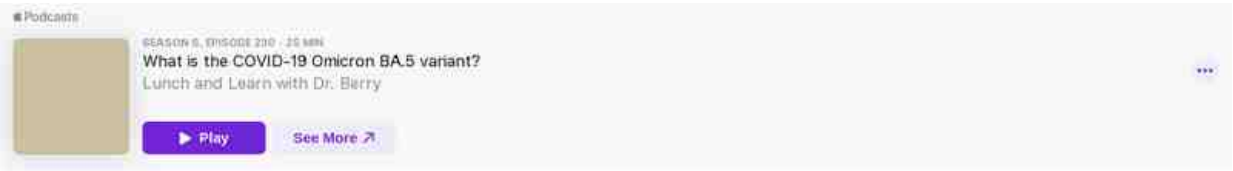
vanessak (2022-12-04 19:31:53)
Hi Andy, Your blog is well written with really good supporting evidence. Your critical appraisal of the chosen ad was good. Great job! Vanessa

## December

### Module 6 Blog: Infectious Disease Policy Recommendations (2022-12-08 03:10)

The COVID-19 pandemic will probably be one of the most momentous events of the 21st century. This pandemic has affected nearly every person globally and taught us many important lessons in pathology, ethics, and public health to the masses. Since COVID-19 was declared a global pandemic in March 2020 (WHO, 2020), multiple variants have emerged. Viruses constantly have mutations to their genetic code, and if it has one or more new mutations, it is called a variant (DeSimone, 2022). Many variants have broken out since the original pandemic, but the one that is the most pertinent to focus on now is the Omicron variant, with the BA.5 subvariant. Additional context on the BA.5 subvariant is found in this podcast episode by Dr. Berry:




IFRAME: [1]https://embed.podcasts.apple.com/za/podcast/what-is-the-covid-19-omicron -ba-5-variant/id1249875787?i=1000570574438

## Why is the BA.5 Subvariant Important?

This subvariant is of particular concern at the time of writing this blog since it is possible for this variant to cause a surge in cases during the holidays. The BA.5 subvariant is capable of causing such a surge because it is more transmissible than the regular SARS-Cov-2 virus and is more resistant to current measures of immunity (DeSimone, 2022). If this subvariant surges throughout the next few months, restrictions must be enacted on usual civil liberties, and infected patients, their families, and any other individuals at risk must be quarantined. It is important to note that this combines the ideas of "isolation" and "quarantine," and isolation refers to the separation of infected people, while quarantine refers to the separation of people at risk of infection (Barbisch et al, 2015). Because the BA.5 subvariant has an incubation period of 1 to 3 days, people can be infected without showing symptoms, further proving the need to isolate these individuals (UC Davis Health, 2022). Looking back on the Bubonic plague, Milan survived the plague with minimal casualties as it enacted stringent quarantine laws in that nobody was allowed to leave or enter the city, and people at risk were locked in their homes. More context to Milan's measures against the plague are detailed in this video:


## What are some Policy Recommendations that Should be Enacted?

My policy recommendations are certainly not as Draconian as those enacted by Milan, but they will help to "flatten the curve" if a surge of the BA.5 subvariant occurs. My first policy recommendation would be that any individual that tests positive for the BA.5 subvariant and any person that came in close contact with them must quarantine for at least five days, as

recommended by the CDC. The COVID-19 virus and its subvariants spread through respiratory droplets, so close contact with people outside one's immediate family has to be restricted to slow the spread (Public Health Agency of Canada, 2021). My second recommendation would be to release media to encourage the population to vaccinate with the bivalent booster (Health Canada, 2021). Due to the efficacy of the bivalent vaccine, it would help reduce the chances of both getting the BA.5 subvariant and reducing the possibility of grave illness (Chalkias, 2022).

This is an infographic that informs people about basic information on the bivalent booster. It includes details on what it protects against, how it's administered, and who can receive it.

My third recommendation would be to enforce travel restrictions on land, sea, and air borders. COVID-19 spread to every country because infected people went to every part of the world, so implementing tighter border control measures can help reduce the number of infected people coming into Canada (Public Health Ontario, 2022).

## What are some Counterarguments to these Policy Recommendations?

Of course, multiple counterarguments should be made regarding the policy recommendations I detailed above. The strongest counterargument against quarantine and isolation is that they negatively impact the mental health of those who are quarantined and others who have to quarantine. A 2020 study supports this argument as it found that quarantine exacerbates mental health issues like anxiety, depression, and psychological fear (Hossain et al, 2020). This is a strong counterargument, which means that an emphasis on mental health support during quarantine is just as imperative as the quarantining itself. A counterargument against travel restrictions is that they usually last for a long time usually after a virus has entered a country via an essential traveler. If an outbreak of the BA.5 subvariant is already ongoing in a country, enforcing travel restrictions will not do much to stop the spread of the virus within the borders of the country (The Economist, 2022).

An image that shows not only the mental health issues that stem from the presence of the virus, but also how quarantine can exacerbate these issues.

## What Implications does BA.5 have to all Members of a Community?

In implementing these measures, it is also imperative to analyze the impact of social determinants of health on the BA.5 subvariant. In the pandemics that have happened over the past

few centuries, the most affected people are the underprivileged members of society (Abrams & Szefler, 2020). Ample and equitable access to safe places for quarantine and vaccine clinics is vital for protecting the most vulnerable community members against the BA.5 subvariant. Beyond the policies outlined in this blog, further measures such as access to testing and shelter and improving healthcare access, in general, can dramatically reduce the burden that the underprivileged members of a community carry during a surge in a pandemic. A deeper discussion on the importance of the social determinants of health in relation to COVID can be found in this video:


Word Count without Citations, Headings, and Captions: 794

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vanessak (2022-12-22 01:23:52)
Hi Andy, Great job answering all the assignment questions with appropriate depth and specificity. Well done! Vanessa


BlogBook v1.2,
LaTeX 2$_\varepsilon$ & GNU/Linux.
https://www.blogbooker.com

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