

Consumer Access in the Field of Medicine

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**On my honor as a University Student, I have neither given nor received unauthorized aid
on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments**

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Introduction

Cancer is one of the leading causes of deaths in the United States, and it is estimated that approximately 2 million people will be diagnosed with some form of cancer in 2024 (SEER, 2024). This is not counting the millions of people who already live with cancer and go through many different expensive treatments that have not progressed in decades for many of the cancers. Currently, the leading treatments for cancers are surgery followed by chemotherapy and radiotherapy (National, 2024). These are all costly methods that a lot of times do not lead to a sure result because there are recurrences after a period of time. Cancer is also only one of the many diseases that affects millions of people every year, and all of them have costly methods of care that may or may not be effective. The STS research essay aims to look into the social factors that affect the cost and accessibility of healthcare.

Consumer access to healthcare is a topic of much interest especially in the United States. Many say that current treatments for different diseases are priced too highly to be able to be accessible to all that need it (Vokinger, 2021). The main focus of this STS research paper is to look into consumer access in the field of medicine from the perspective of the sociology of scientific knowledge STS framework. The sociology of scientific knowledge (SSK) framework focuses on “knowledge was constitutively social” specifically the social implications of scientific growth (Shapin, 1995, pg. 289). This is an appropriate framework to use because with new treatments and therapeutic approaches to treat certain diseases there is the concern for the social effects. These effects can be anywhere from not having diverse enough treatment options for people to choose what treatment they want to not being able to afford the treatments that are available. In 2021, 27.2 million people in the United States did not have health insurance, which is necessary to help with the costs of medical care (Keisler-Starkey, 2022). For the research paper

my plan is to understand the cost and profit ratios for the pharmaceutical companies as well as the consumer costs with or without insurance and to come up with a plan for how to resolve the issues that are discovered. SSK advocates would say that with the growth of scientific knowledge and with advancements in the field it is important to consider the social implications and those that are affected on a personal level such as the consumers of the treatments.

Cost and Profitability of Pharmaceutical Companies

As discussed throughout this research paper one of the leading diseases in the United States is the many different types of cancers. The leading therapy methods for treatment consist of the use of chemotherapy drugs as a first line treatment method. The current cost on average for a single treatment of a chemotherapy drug is approximately \$10,000 (Mailankody, 2015). It has been shown that annual treatments can cost above \$100,000 and have led people to declare bankruptcy just because they need the treatment that may be able to save their lives. These costs are for already approved FDA treatments, but interestingly there is a very miniscule difference between in-class drugs, approved and in market drugs, versus novel drugs, recently FDA approved drugs (Kantarjian, 2023). The prices for these drugs have actually increased substantially over the past several years. Imatinib, a leukemia chemotherapy drug, which has helped increase the 10 year survival rate from 20% to 85%. However, the price increase over the past few years had been \$30,000 in 2001 but increased to \$92,000 in 2012. As quoted by the Journal of Clinical Oncology, “a prime example of a drug being worth as much as it can be sold for” because there has not been much change in the drug itself however they have been able to markup the price by so much more (Mailankody, 2015). Using the SSK ideas, they would talk about how this is negatively affecting society because there is no advancement in scientific technology, however, there is still an increase in cost.

Most profit margins in non pharmaceutical companies averages around 7.7%, however, for pharmaceutical companies it is an average of 13.8% (Mailankody, 2015). Pfizer, which is a major pharmaceutical company, actually has a profit margin of approximately 42% (BBC, 2014). These huge profit margins is something that is an isolated issue to the United States. In the United Kingdom there was an uproar from the public when pharmaceutical companies were going to have an increase in profit margins from 4% to 8%, however the treatments used in the United Kingdom are the same as the ones used in the United States (Prendergast, 2022). It is interesting to think about why the cost for the same drugs is so much more in the United States compared to internationally. Some SSK theorists would claim that it may be due to the great amount of innovation and discovery that occurs in the United States compared to internationally which is why they need the costs to be higher to help fund the next innovations. However, the social impacts of the higher costs is something that seems to not be considered for the American public. Also, would an almost double profit margin between non pharmaceutical companies and pharmaceutical companies show a substantial increase in research done in the area.

Accessibility to Affordable Health Care

Most healthcare in the United States is through private insurance companies which allows for them to have high rates for care on top of the monthly payments that must be made. There is also government funded Medicare and Medicaid to allow for affordable healthcare, however there is still a huge amount of out of pocket spending that occurs in this option (Medicare). For those who do not have Medicare and Medicaid, approximately 20% of the monthly income of retired Americans is actually used on healthcare (Ochieng, 2024). It is also an approximate of 27.2 million American citizens that are uninsured and this causes them to not be able to afford basic medical treatments. In contrast, internationally countries such as the United Kingdom have

universal healthcare for all which allows for everyone to have equal access to healthcare. It is also interesting that many Americans live in constant fear of not being able to afford treatment even with healthcare, because there are so many fine prints that would lead them to not pay for the treatments. There are many stories that people will tell about how they were denied a drug by their insurance company on the basis that there are cheaper drugs out there, however, sometimes this is the best option for the patient and now they are unable to obtain the treatment they need.

Another important aspect of healthcare is the fact that Medicare will actually pay for all cancer treatment 100% (Rudowitz, 2023). This can be good for those who are covered to be able to get treatment, however, this can lead to pharmaceutical companies to increase their price of treatments knowing they will still get paid. This is a disadvantage for those who are either uninsured or have private insurance that will not cover the treatments, because these folks are not able to afford the treatments that have these new increased costs. There is also a lack of regulation of price gouging in the United States which allows for uncontrollable increase in therapy prices with no one to make them decrease them. The SSK theorist would say that without proper regulation allowing companies to increase prices affects the society negatively without any new research being done to find new treatments.

The sociology of scientific knowledge was a framework which was developed in the late 1970s and the main goal is to look at the scientific knowledge and how it shapes society (Pinch, 2015). One major aspect of medical research is that companies will put more money into projects that get the maximum amount of funding, however, this can lead to companies treating symptoms instead of getting to the underlying issues. An article released in the American sociological review analyzes how different advancements in biomedicalization have impacted healthcare in the United States. In this Clarke shows this shift in an emphasis of pharmacological

treatments and technological interventions instead of holistic approaches to one's health. This biomedicalization process leads to treating individual health issues such as poverty and housing insecurity which can lead to health issues being solved by clinical interventions instead of broad social changes and policies that need to be placed. Another aspect discussed in this article was how biomedicalization is driven by technological innovations and aligned with some sort of commercial interests, instead of the need for using other knowledge and alternative approaches to healthcare and treatment methods. Terminology used in the article was biomedical hegemony which portrays how there can be an increase in marginalization of non-biomedical perspectives and alternative medicine which can limit the diversity of healthcare options that is present for individuals. Overall, this biomedicalization leads to an uneven distribution of care for marginalized communities, those who may not be able to afford the care, and they have an inability to access treatments made by pharmaceutical companies. With the advancements being so technology heavy it can make costs for patients increase, and due to money being put where the funding is there is a lack of research in more affordable or different types of care which takes away the ability to choose from individuals. This just shows how the SSK sociologists perspective would be that the impact of the scientific advancements of technology is causing societal changes and leading to inaccessibility of care for the American population (Clarke, 2003).

Another article to examine to show the SSK framework and its relationship to the argument of there being a lack of accessibility in the American Healthcare system is Barry Barnes 'Understanding Agency: Social Theory and Responsible Action.' This explores agency as a social theory and how individuals act independently to make choices that influence their lives. This is hard to see in the medical field, because for a lot of diseases there is not a diversity

in treatments and so the one there leads to being the only decision that people have to make. In the SSK framework, agency is important because it shapes the production, dissemination, and application of scientific knowledge. People such as scientists, researchers, and doctors have important roles in the construction of knowledge that is given to people when making treatment decisions. There are many stakeholders in the American healthcare systems and everyone wants different things in the healthcare field such as the insurance companies are trying to make the most profit possible whereas the patients are trying to get the best treatment for the lowest costs. This where patients would use agency to speak up for what they need and bring up issues with the healthcare providers and ask for other treatments. Healthcare providers would use agency to make treatment decisions that would be best for the patient but also help them professionally and in an organization setting (MacDonald, 2002). SSK would also look to analyze the social, political, and economic factors that shape the drug/treatment discovery aspect of healthcare to determine if there is equity between the different groups that create and use this technology. There appears to be a disconnect between companies who are attempting to make profits compared to the users who need these treatment methods and the SSK framework shows that disconnect and can be an eye opening discussion in the American healthcare system.

What Can be Done

Now we have spent the last several pages describing the issues in the healthcare industry, specifically the accessibility to treatments and profitability of pharmaceutical companies. This is a difficult problem to solve as we have to think about who would be responsible for fixing the issues as well as who would be responsible for the checks and balances of the system.

Throughout the paper one aspect that was discussed was the cost and profitability of the pharmaceutical companies. Many of these major pharmaceutical companies are able to price

gouge for their treatments because there is no regulation put in by the United States government to eliminate the possibility for this price gouging. There is also a very heavy use of patents especially with drugs which makes it so no other company can make generic versions of these drugs to help build competition in the market. Since there is no competition in the market, it allows for companies to charge as much as they want and know that consumers are forced to use their treatment since it is the only option. One aspect that the government needs to focus on is regulation on the amount of profit that pharmaceutical companies can make. Unfortunately, in the United States lobbying has a big effect on decision making and since the pharmaceutical companies have the money the government officials end up listening to the money instead of the needs of the American people. We need to take notes from other countries, such as the United Kingdom where they have universal healthcare for all of their people. They are a country that is a functioning example that this can work and we need to think less about filling the pockets of the pharmaceutical industry CEOs and providing appropriate healthcare for the citizens of the country. For regulation, the government should conduct studies for the cost of research to produce the drugs as well as the manufacturing costs to determine the profitability margins. It is costly to discover new treatments, and for every discovery there are about 100 failures that the company takes, and to keep the pharmaceutical people happy it is important to take that into account. Therefore, there needs to be a study done to determine all the costs and then create a range of profitability margins for these companies when selling their treatments in the market. There also could be a space to reform the way patents work especially in the drug business because there needs to be an increase in competition for treatment methods for diseases such as cancer.

Another aspect of healthcare that was discussed throughout this paper was the lack of affordable healthcare. Many Americans are uninsured due to jobs or not being able to pay monthly insurance fees. This puts them in a bad place when they need medical attention, because they rack up medical bills that are not affordable for them and put them in debt that can be tough to get out of. It is interesting to think about how these treatments will save a person, but also hurt a person in another aspect as they will not be able to provide for themselves. This is a crazy experience in America as there is government funded insurance, Medicare and Medicaid, which is supposed to be an affordable insurance option however not everyone has access to this resource. The government funded insurance also increases the problems with price gouging, because as mentioned above, they will pay for cancer treatments and since there is no regulation in place companies can start charging however much they would like without concern for not getting paid. This puts a burden on those without government funded insurance. This is another aspect where the federal government would need to put into place regulation on pricing for medical treatment to avoid this high profitability for companies.

As an SSK theorist, we believe that societal needs helps push for technologies to form, and while this is true that we need to have a push for treatments that are to help treat the most abundant diseases we also need to make sure we are making things that are accessible to those we are making it for. As researchers sometimes we get disconnected from the reality of who we are discovering these treatments for and how they will be able to receive and benefit from these drugs. As researchers we need to stay connected with the business aspect of drug production and also fight for the accessibility of the drugs which is done by making a greater effort to be present in those decisions. It is our responsibility to work with the business people and work with the ethics people and make sure that we are focusing on the patients and not just the companies

profitability. We also need to think about the societal effects of our drugs, and not have tunnel vision for a certain treatment and look to find different treatment methods for diseases to allow for patients to have the autonomy to choose what treatment they would like and what is the best option cost wise for them. We need to start putting focus on what society needs as well as how we can best provide for them with the technology we produce and shift our focus to the patient and not just making big discoveries.

Conclusion

Time to loop back to the beginning of this paper and think about how cancer is a leading cause for death in the United States. Everywhere you turn you will find someone that has been directly affected by cancer whether it is themselves or a loved one. This is a very prevalent disease and there are few treatment methods out there right now to help treat patients and improve survival rate. Something that is more devastating though is the fact that there are treatments for some things that can help patients, but cost is becoming a huge factor in the ability for these people to get the treatment they need. As a society we push for technology to be developed that is geared towards solving the immediate problems especially in the healthcare field, but we need to think of the perspective of accessibility for those that would use the technology and be the ones benefiting from it. There are many aspects of the American healthcare system that need to be improved on such as profit margins for companies producing treatments as well as affordable health insurance to cover all Americans. As stated throughout, other countries around the world have regulation in place to avoid insanely high prices for medical treatments and have universal healthcare for all their citizens, and we as a leading country in the medical field fail to provide that for the citizens. We should take notes and improve the accessibility to healthcare for all those who live in the United States. It is time to

move for basic rights for all Americans and to make sure no child, adult, or elderly person needs to worry about whether they get the treatments they need for a disease or put food on their table for their family.

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